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OF SECONDARY-SCHOOL PRINCIPALS



Outdoor Education
for
American Youth

SERVICE ORGAN FOR AMERICAN SECONDARY SCHOOLS

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Outdoor Education for American Youth

Prepared by a Committee

of the

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Physical Education, and Recreation

A Department of the
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2. "Outdoor Education and the Curriculum" by EARL C. KELLEY, Professor of Secondary Education, Wayne University, Detroit, Michigan
3. "The Community School Theory and Its Implications" by G. ROBERT KOOPMAN, Associate Superintendent, Department of Public Instruction, Lansing, Michigan

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Chapter V. *A Look Toward the Future* by JULIAN W. SMITH

Preface

JUST ten years have elapsed since the publishing of the May 1947 issue of THE BULLETIN OF THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS, which was devoted to "Camping and Outdoor Education." During this ten-year period, outdoor education has assumed an ever increasing importance until today it stands as one of the most significant developments in education.

There are many reasons why progressive school administrators are devoting increasing attention to outdoor education. In this age of expanding leisure, millions of people are seeking the out-of-doors. Unfortunately, thousands of them will be denied the full measure of enjoyment of outdoor experiences because of the lack of basic attitudes, knowledges, skills, and appreciations. Most of these basic requisites for enjoyment of the out-of-doors can be learned and developed through a sound school program of outdoor education. Thus the school has a vital responsibility for equipping every boy and girl with these attitudes, knowledges, skills, and appreciations which are so essential for lifelong enjoyment of the out-of-doors.

Because of their deep concern for the role which secondary schools should play in the development of outdoor education programs, the National Association of Secondary-School Principals and the American Association for Health, Physical Education, and Recreation, both departments of the National Education Association, have cooperated in preparing this publication. An attempt has been made to incorporate the best thinking of outdoor education leaders and school administrators who have been responsible for developing successful programs in various parts of the country. At the same time, an attempt has been made to cite as examples only those programs which might conceivably be duplicated by other school systems desiring to use these examples as patterns for the development of their own programs. Thus we feel this material will be especially helpful to school administrators, boards of education, and other professional and lay leaders sincerely interested in the development of outdoor education.

PAUL E. ELICKER
Executive Secretary, NASSP

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Introduction

OUTDOOR Education is a common sense method of learning. It is natural; it is plain, direct and simple. The principal thesis which underlies the implications of outdoor education for all subject matter, in all areas of study, and at all levels is:

That which can best be learned inside the classroom should be learned there.

That which can best be learned in the out-of-doors through direct experience, dealing with native materials and life situations, should there be learned.

This realistic approach to education rests squarely upon the well-established and irrefutable principle of "*learning by doing*."

Scientific research and psychological testing have been going on for many years to determine how learning actually takes place. Not only was the Dewey theory of "*learning by doing*" established as sound; it was also proved that through direct experience, the learning process is faster, what is learned is retained longer, and there is greater appreciation and understanding for those things that are learned at firsthand.

Thus it becomes crystal clear that much of what is called for in the standard curricula of the public schools can most effectively be learned in the out-of-doors. Moreover, learning in the open is a mutual process. In the classroom, subjects tend to become artificially separated from one another, as do pupils from teachers. Regaining touch with the real world leads to their becoming reunited. People and things are seen in their true relationships; facts and ideas that are most important emerge in perspective.

While school camping is not synonymous by definition with outdoor education, it rests on the same premises and is recognized as one of the forerunners in its development. It furnished the laboratory in which testing could be done, processes refined, leadership identified. Experiments were conducted which related camp learnings to the progress of the camper in school. Results were conclusive—and amazing.

More than a decade ago we conducted further experiments to see whether some learnings could be achieved more quickly and effectively in a favorable school camp environment than in the classroom. Scientific testing used in these experiments did prove that the camp setting was more effective for certain learnings. The outcome of these significant findings and the pilot programs which followed went far to establish the validity of outdoor education.

Today, outdoor education, including school camping, is accepted as an integral part of the total school program. Few administrators doubt its vital role in the curricula of their schools. It is generally accepted that every school youth should have, as a regular part of his school experience, opportunity to adventure and explore—thus solving for himself some of the questions posed by life outdoors.

Educators believe it is good for our boys and girls to experience at firsthand something so direct, so plain and simple and natural. Perhaps that is why as you turn the pages that follow, you will find them documenting more than half a hundred plans by which American schools are now seeking to fit outdoor education into their existing patterns. They are committed to a principle and to a way of life.

L. B. SHARP

CHAPTER I

The Setting and Need for Outdoor Education

I. THE SHAPE OF THINGS TO COME

HARASSED administrators are conditioned to resist the advances of myriad special interest groups that clamor for the inclusion of new programs in their already bursting curricula. Rightly, they demand to know "why?" even before challenging "How can we do it?" Recreation skills—angling and casting, firearms training, camping, small craft and water safety, skiing, mountaineering—the list seems to grow longer every year. Where are they to draw the line?

Nowadays, educators readily concede that boys and girls who are to become constructive citizens must learn to use resources wisely. There must be problem solving in the real world of their own community with which these youngsters are most familiar. They must taste success which comes with achievements valid by adult standards. If these experiences are to be other than vicarious, they must use the actual terrain where the problems exist as their laboratory.

But what of these other activities that seem at first glance unrelated to the recognized workload of the public schools?

Not until we are prepared to accept the term *Outdoor Education* strictly at face value does their true place in the pattern of total education emerge. This is not another discipline with prescribed objectives like mathematics or science; it is simply a learning climate which offers special opportunities for direct laboratory experiences in identifying and resolving real-life problems, for acquiring new skills with which to enjoy a lifetime of creative recreation, for attaining attitudes and insights about working with other people and getting us back in touch with those aspects of living where our roots were once firmly established.

The Changing Scene in American Life

Last year, more than thirty million Americans bought licenses to hunt and fish.

In 1955 over ninety million persons visited our national parks and forests.

In 1956 more than twenty-five million licenses to operate small craft were sold in this country.

Figures like these document one illuminating fact. *Today, more of our nation's citizens seek recreation in outdoor environments than through*

any other single channel that allows them full and active participation. As individuals they run the entire gamut of ages from eight to eighty. Neither sex predominates.

The astute school man will not let himself be sidetracked into sterile debate as to whether recreation is a legitimate concern of education. He knows full well that it is his job to turn out boys and girls equipped both as individuals and as members of a social group to adjust and contribute to the complex society in which they will find themselves launched. Most areas of education serve to enrich the recreational life of the individual, while sound recreation involves activities that further the development of the whole person and are thus an integral part of his education. Moreover, education of this sort is something that will tend to persist and grow after he leaves school for the rest of his natural life.

Rather the educator will turn perceptive eyes upon the *quality* and *environment* of recreational opportunities to which his charges are being introduced and for which they will be equipped. If he sees them stimulated to seek and enjoy emotional outlets in which they can take an active, even a creative part, then these will be judged of the highest order. In evaluating these outlets, he will give due weight to the job setting in which today's youth is destined to find itself, for the significance of recreation is not merely to satisfy a need for play nor to provide a pleasant excuse for doing nothing. Ideally, it will include all-absorbing activities that *contrast sharply with the surroundings of one's working life*, so that he will be drawn out of himself to emerge later refreshed and regenerated. Thus environment is an all-important factor in identifying what are worth-while recreational experiences for each of us.

The Shift to the City

This trend to give first priority to recreation in outdoor areas may then be attributed to healthy intuition on the part of the American public; for figures from the Bureau of the Census indicate that by 1950 almost sixty-four per cent of our people were living in urban situations, while it has been said that today seventy-five per cent of our youngsters go to school in the city.

Before he thought, the principal of a large urban high school might say: "Well, there's one thing I certainly don't have to worry about. Camping and outdoor living are nothing my students need learn!" How long can America's educators afford to remain in an ivory tower?

If these boys and girls in the big city schools are to emerge as well-integrated people and take the new era in stride, they must be prepared. Granting the wealth of opportunities their curriculum now offers, they still face the nation's toughest problems of mental health and adjustment for they are caught up in the very vortex of emotional strains and pressures and unrelenting pace of modern living. They lack the natural checks and balances and reference points which are the birthright of the country dweller.

As they go on in life, does their principal anticipate that *all* the bonanza of new-found leisure time to which our age has fallen heir will be constructively taken up in the music and art and civic pursuits for which he has so richly equipped them? Are they to be content with watching television or other spectator sports, or should they be trained to participate? Does he know of any team sport which will serve them all their lives? Realistically, won't they head out of town in ever-increasing thousands for more and more weekends and vacations that demand the skills of outdoor living and recreation—just as their parents are now doing?

New Ways Not To Grow Old

Projecting these implications for a lifetime of healthy living, there is another phenomenon of the current era that we cannot neglect—increased longevity. Back in 1900 the average man used to die at forty-six years of age and the average woman at forty-eight. In 1954, they lived to be respectively sixty-seven and seventy-three. Even this increase in average life span by more than twenty years does not make the point so dramatically as conservative insurance company tables, which give a person who has reached the age of fifty a life expectancy of 21.87 more years to spend on this earth!

This miracle of medical science, accomplished chiefly during the past two decades as infant mortality and epidemics came under control, is no more breathtaking than medicine's new approach to keeping active those who have reached the older age brackets. Just as they now discharge surgery cases from the hospital in days when it used to take weeks, any doctor will tell you that he regards it as sound therapy to keep his older patients in better health for a longer time for them to engage in absorbing activities, even though this may necessitate his administering drugs to overcome specific disabilities. So closely is the health of their bodies linked to their mental and emotional tone that these will actually remain in better physical condition through purposeful use than through disuse.

Remember that this is existing practice for men of science whose ethical code commits them to keep human bodies functioning despite almost any social sacrifice. It places a high premium indeed upon education which will equip each youngster with skills and attitudes and understandings that open avenues of creative recreation suitable for his declining years. For these things are not learned by most of us after we once become adult, and it is the rare and lucky individual who still finds himself in the autumn time of his living fully occupied with job or career. Yet within the next decade or two, new trends will impinge upon our society that are destined to increase many fold these years of leisure for the average American.

Social Outcomes of the Push-Button Revolution

Labor unions and industry have furnished the facts, but they alone appear to be duly concerned. It may conservatively be stated that within

the next ten years, millions of hours of additional leisure time will be the inevitable by-product of the push-button revolution we call *automation*. By 1965, a work week that *lasts only four days* will be a reality for a large segment of our people.

While it is clearly not a function of this report to explore *all* the educational implications of automation, two questions raised by the C.I.O. are directly pertinent:

"Will the nation's educational, cultural, and recreational facilities be capable of meeting the challenge of increased leisure made possible by automation—longer vacations, reduced work weeks, two and a half or three day weekends?"

"Will power and natural resources be sufficient to meet the potential increased output made possible by automation?"

Thus, from another angle we see brought into sharp focus the twin areas of concern for education which demand access to outdoor laboratories—recreation and conservation. In order to grasp clearly what is implied, it may be pertinent to re-identify three types of technological development that actually serve to define automation, since loose talk and misinterpretation have clouded its meaning:

1. *Integration*—the linking of conventionally separate manufacturing operations into lines of continuous production through which the product moves "untouched by human hands."

2. *Feedback*—the use of control devices or servo-mechanisms that allow individual operations to be performed without necessity for human control.

3. *Computing Machines* (like Univac)—capable of recording and storing information, and of performing both simple and complex mathematical operations on such information.

It is evident that these three concepts reduced to practical application imply revolutionary changes in personnel requirements, both for industry and for business giants, such as the telephone companies with their dial systems, utilities, banking, insurance, and a host of others. Not only will they mean that fewer man hours accomplish more production, but they will also vastly alter the working life and emotional needs of the individual. Old incentives will become meaningless and new ones will take their place. At a premium will be the alert, technically trained "service" man, concerned with watching dials and correcting mechanical failures, rather than operating machines himself. He will be carrying immense responsibilities and using his brains all the time. His productive working life will presumably be shorter, as well as his work week. Yet his pay checks and benefits will place him in a strategic position to provide himself and his family with transportation and recreation on a scale hitherto undreamed of.

For the men and women of this new "working class" in America, the enjoyment of outdoor areas for weekend recreation, vacations, and retire-

ment will become a primary and meaningful incentive, even more so than is now the case for our professional groups.

People Plus More People Build Cities

As we have already noted, Americans are fast becoming a race of city dwellers, but there is another relentless trend in our society which of itself literally *makes* cities. To grasp its import, we have only to look at the new housing developments around almost any urban center.

Bureau of the Census experts predict that by 1975, our present population of 167 millions will have risen to at least 221 millions—an increase of over 7,000 more people living in this country each day!

Up to this point we have been discussing social implications for workers who make up the base of our economic pyramid—in big business, industry, the floating populations that move from factory to factory, the supporting occupations of cool miners, railroad men, and the like. But it is inevitable that workers in the various service trades who supply their needs and are dependent upon their payrolls will soon be drawn into the same urban vortex of living conditions. Even our farmers become relatively fewer each year as their individual production is increased through scientific practices and applications of automation. Marginal producers are forced out and must seek jobs in the city.

If we look squarely into those seven thousand new faces a day, we can discern among them the many who live to an older age, the voting majority who have never made firsthand acquaintance with the land and resources upon which their very existence depends, the floating populations of people who lack real roots anywhere, the universal and imperative need for constructive use of leisure time to rebalance perspective.

It is small wonder that return to the outdoors is now taking on the dimensions of a great national movement.

Implications for Conservation and Education

Thus it becomes apparent that all the trends we have discussed serve merely as preamble to resolving the sort of social problems which conservationists and educators must face together—for they are paramount to the welfare of our free society. Unless democracy through this sort of teamwork can find effective means for coping with them, America faces attrition of her resources, both human and natural, which can lead only to tighter Federal controls or to fundamental national weakness.

The impact of this ever-growing flood of recreation-bent city dwellers upon our remaining outdoor areas becomes the direct concern of the conservationist, for he is committed to promote the *wise* use of natural resources by people. What if new millions descend like Attila's horde of old, untrained but armed to the teeth with every type of equipment and gadget that a modern sporting goods store can furnish? What will they do to our national heritage of forests and lakes and rivers, our fishing and hunting, our peaceful countryside—even though they come to play! What will they do to each other—morally and physically? Anyone who

has watched a gang of youngsters play in a deserted building will know the answers!

This in itself is one of the critical problems with which conservation education must deal, and one which to date has been least widely recognized as such. But there are others implicit in the situation; pyramiding populations plus increased ability to pay are destined to make stupendous demands upon our hard-pressed natural resources. Of these, admittedly wildlife is recreational in character, but soils, water, forests, minerals, and the remainder of the animal kingdom are of primary utilitarian significance. Government estimates indicate that by 1965 our national income will be fifty-two per cent higher than it is today. More people spending more money mean very simply that we must have more intelligent use of our resources if these are to stand the strain.

Now that most of our citizens have become divorced from firsthand experience in managing these resources, yet are still instrumental in sucking them dry, how can we expect to insure their conservation through democratic process? There seems to be no adequate answer except to reacquaint people, and particularly our youngsters, with the issues at stake. While much good background can be developed in the classroom, it appears to be the consensus of informed opinion that, to result in desirable behavior changes, this must be fortified with direct experience in the field.

High-school boys and girls, impressionable, altruistic, and believing as they do that black is black and white is white—with no room for a gray zone of alibis or excuses, feel that their schools owe them this opportunity for significant community and national service.

Our Coefficient of Failure

In contrast with seven and one half million boys and girls now enrolled in our nation's high schools, more than one million have dropped out.

Breaking down these drop-outs by age classes, it proves that about one half of the sixteen to seventeen year old group are without jobs, guidance, supervision, or direction, while in the fourteen to fifteen year old group that ratio rises to over two thirds! It is small wonder that delinquency runs about ten times as high among the drop-outs as among those boys and girls who stay in high school.

Now these one million lost youngsters are not merely a problem in themselves. They are the symptom of a greater problem. They point up with inexorable clarity the inadequacy of traditional high-school offerings to meet the needs and challenge the abilities of that docile herd of captives which remains within the school's walls, presumably through inertia or following the urge to conform.

No one in his senses will advocate outdoor education as a panacea for curing all these ills, but it is one of the most logical and promising tools modern educators are learning to use as part of the process. It can make a significant contribution to meeting the needs of millions of boys and girls our high schools are now losing—in whole or in part.

Pioneers, Oh Pioneers

Lincoln Steffens once pointed out with rare perception the superior status achieved by his "*Boy on Horseback*"—how self-assurance and security were the product of rediscovering this primitive proof of command over environment that lifted one mentally as well as physically above his fellow man.

This is but a symbol of one sort of experience needed to round out the modern person. For most of us who have lived to become mature adults, our quota consists in a mosaic of minor incidents spread out over time and space, *but each one did something to make us whole.*

* * * * *

I remember a storm-tossed night alone on a mountain lake, so black and rain drenched that no beam of light could pierce the murk. My small boat pitched and wallowed down each trough to be eased back up the next crest lest it swamp completely. A seeking wind gusted from the northeast to drive spray and rain needle-like into my left cheek. And therein lay the secret: keep the wind in that quarter for a constant bearing to reach camp and security. At seventeen I knew no apprehension, only exultant confidence in a strong arm and expert boat handling to bring me in—as in due course they did.

* * * * *

Three youngsters crouched around the site of last night's camp fire. A foot of rotten snow still lay in the woods, and it had been raining for twelve hours. Their sodden bedrolls had been partially protected by canvas, but everything else in this country of northern softwoods was drenched through and through.

Abruptly, one of the boys rose and trudged off silently through the slush till he reached the trunk of an ancient Canadian birch, long since dead. Moments later a tiny flame from his lighter flickered against the heavy flakes of bark, died, flickered again and began to mount as the oil ignited. He dared not breathe while part of his soul climbed with that tenuous flame to support it in its supreme effort. When it stabilized and he fed it faggots with tender care, his two companions leaned closer until they were knit as one with him in the warmth of the growing fire.

* * * * *

At 4:30 the sun rose over Idaho. It touched Baker and the other volcanic peaks with that lambent shade of rose the Spaniards named Sangre de Christo. Below us lay a cloud bank a couple of thousand feet thick that cut us off from earth as completely as if we were on another planet. A hundred feet above, dormant fires that smolder in the bosom of Ranier sent wisps of smoke curling gently upward through the eternal snows that blanket her summit.

During the night we'd climbed from Camp Muir upward through Godiva Gulch, clinging with our crimpoms to the steep ice walls, listening

for the dread trickle of rock that warns of avalanches which hurtle down that worn gulley with scarcely time for you to jump.

Now we stood alone on the glacier that shrouds one of the world's great peaks. There were a crevasse or two still to be negotiated, but all real danger lay behind and below. We belonged to a special fraternity.

* * * * *

Each of us can perhaps look back and cite a variety of occasions on which he was privileged to joust with primitive forces and to win his spurs, but what of today's adolescents to whom society may unwittingly deny this fundamental human right? Are we so certain that those we now stigmatize as delinquents were not simply victims of a misdirected urge for adventure and self-establishment far better met by making available such opportunities? Might not many of our "docile sheep" who drift along into drab anonymity suddenly come to life as effective citizens when they had thus rubbed horns with reality in the raw?

50 Million Private Car Owners Can't Be Wrong

In this age of air travel it is commonplace to observe that our world has shrunk, but less frequently recognized is the fact that communities have extended their bounds to a like degree. For a community's limits must be identified by the area required to service the living needs of its people, both physical and emotional.

Out of the very core of our push-button urban society rises a phenomenon of central significance—the family automobile. Americans now own more than 50 million private cars. This is no mere evidence of individual opulence nor of business necessity; it is a symbol of new-found freedom of soul for city dwellers. Over ever-increasing networks of super highways, these millions of motor cars are putting on mileage to create a new concept of community geography.

As you ride through the night past unending rows of suburban homes that surround some strange city, think twice before you rank their occupants as helpless captives of their environment. Behind many a lighted window lies a stack of road maps and atlases ready at hand.

This is the stuff that dreams are made on. For one, there is the vision of that incredible silver torrent plunging down from the sky named Yosemite; for another, the herds of elk and mule deer, the moose and grizzlies and lesser citizens that room at large in Yellowstone. It may be ancient cave dwelling which have hung in the canyons and draws of Mesa Verde since the days of Columbus, or a canoe questing down some foam-flecked river among spruce forests of the Adirondacks or Quentico-Superior. Perhaps it is just the nostalgic smell of a bow bed or the hiss of skis over packed powder snow on a high trail—the loveliness of the Smokies in rhododendron time, or a herd of antelope skittering across the plains while a fresh wind blows clouds off the Bighorns.

These things are as much American as baseball or baked beans or television. When the average citizen can reach out for them by piling his

wife and his kids and his cat in the car and taking off half-way across the country, there is nothing unrealistic about thinking of your community as stretching out a couple of hundred miles and perhaps across state lines. In fact, that may be where you will find yourself standing, dwarfed by the generators of some huge power dam which spans your own river and brings lights to the very city in which you live, when you trace these back to their source. Up there at head waters lie the beginnings of your community milk shed and the farms that bring you food, as well as the flood control structures and sustained yield forests which safeguard your economy.

Two Different Worlds?

It would be manifest nonsense to set a double standard that recognized one set of meanings and experiences as the measure of our adult community, and another for its community school. Clearly, this poses problems for which public education as we know it today must find answers. It is demonstrable, however, that their resolution, rather than necessitating the addition of still more courses to an already over-crowded curriculum—just patching up the plumbing as it were—will exercise a unifying influence in the continuing process of curriculum revision to meet the accepted imperative needs of high-school youth in our free society.

Teamwork from the national right down to the local community level is providing invaluable support for the schoolman from both groups and individuals. Outdoor education can supply him with a climate of learning in which vital experiences touch off chain reactions that lend new meanings and motivations to the entire program which his high school offers its youngsters. So, when the wheel has turned full circle, these boys and girls will find every hour of their waking lives all year round caught up in a series of adventures that make sense because each is targeted toward completeness of growing up under adequate guidance and direction. It is they who will be the pioneers of tomorrow's America.

2. OUTDOOR EDUCATION AND THE CURRICULUM

THE central institution for the development of our youth is the school. This is the one place where we all pool our resources so that the young may be helped to grow into adequate human beings. The older notion—that the function of the school was merely to impart knowledge—will no longer suffice. It will not suffice because the conditions under which our young are forced to grow up have changed. Our society is so compact and complex that unless the school sees itself as the youth agency in our society, the simplest needs of our young will not be met.

If the school sees itself as society's central agency for youth, this will be a change in role from that of merely imparting knowledge. This change, I believe, will be in the direction of meeting new conditions that already have taken place in society. If the schools do not become the agency for

youth, then it seems certain that a competing agency will be set up. Never again will this nation allow its youth to deteriorate as in the early part of the last depression, when we had hundreds of thousands of boy and girl tramps on the highways of our country. When this condition arose during the early thirties, two Federal youth agencies were formed to meet the problem. Most of us remember the C. C. C. and the N. Y. A. We did not get rid of these agencies until the advent of World War II; and it is my opinion that if we had not become involved in war, we would still have them, and they would be doing most of the youth work today.

I do not mean to criticize these agencies as they functioned. Something had to be done for our youth who had no place in school or at work. The school found its resources curtailed, and in some respects became a less effective instrument than it had been before. The N. Y. A. gave our youth something constructive to do and a little money they could call their own. The C. C. C. was a gigantic outdoor education enterprise.

I do not believe, however, that a Federal agency is the proper place for these services. We worry about Federal control of education if a few dollars are appropriated by Congress for school buildings, while we run the risk of again turning over a large part of our job to the Federal government by default. In May 1950, just before the Korean war broke out, a bill was introduced in Congress to reactivate the C. C. C.; and so it will be again at the first slackening of employment and prosperity, unless the school sees itself as the proper agency for furnishing these services.

The need for a change in the role of the school from that of imparter of knowledge to that of the broader youth agency has been caused by three major changes in our society. They are (1) *urbanization*, (2) *mass education*, and (3) *new research in the nature of learning*.

The Shadow of the City

It is well known that in the last fifty years we have ceased to be primarily a rural people and have become mainly city dwellers. A large city is not a good place in which to raise children. We will not all move back to the farm on this account, and so we have to do what we can to make the urban setting more tolerable for our young.

By living in cities, we have deprived our children of room to grow up. It takes a certain amount of room for children and youth to have the things to do that bring about growth. This lack of room is a limiting factor even in our best city homes. It is particularly critical in some of our low-income homes.

We have deprived our youth of the land and of the development that comes from living intimately with the earth from which we spring. We have deprived them of the opportunity to assume real responsibility. Learning to be responsible was automatic in the rural situation because it was apparent to all that if everyone did not work, there would not be enough to eat. It is not possible on a 40 foot lot to find enough real tasks for three or four children to learn responsibility.

Once a wealthy man who lived on an estate sought to furnish responsibility to his son by buying a cow for the son to care for—clean the barn, feed and milk the cow, and sell the milk. This the boy did for a while, although he knew that his father could buy a whole herd of cows and hire a man for each cow if he wanted to. The boy knew that the whole thing was phony. He was saved from open rebellion by the intervention of the health department which stopped him from selling the milk.

Some people are inclined to blame parents because our youth do not seem to be as responsible as they were when good people like you and I were young. They even say that parents do not love their children as they formerly did. There is no evidence that human nature has changed, or that parents no longer love their children. We might ask ourselves how we would teach responsibility if there were five of us living in one room with an alley for a playground. Parents have not changed, but the conditions under which they have to rear children have changed.

Youth is entitled to an opportunity to learn to be responsible. This can happen when he has a task that is real, that needs to be done, and that is worth doing. Since this cannot be supplied in sufficient quantity in the urban home, the problem must be met in the school. This fact has many implications for the curriculum.

A New Role for the School

The fact that mass education, where nearly everyone, rather than a selected few, comes to school, demands a new role for the school. I believe education for all is the noblest experiment! Never in the history of mankind has so large a nation offered so much education to so many. It is our country's attempt to make all citizens—even the least of us—literate, informed, and equipped with skills enough to participate in our democracy and to help make it work. It is our recognition of the fact that a democracy cannot survive with an ignorant electorate.

When everybody came to school, however, many problems were created. We had a well-established curriculum which had developed when the secondary school was intended for the few who wanted to enter one of the professions or who had at least shown an aptitude for book learning. The classical curriculum, made up of "solids," was not just well entrenched; it had in many cases become sacred. With some people, any attack upon, or even concern about, this curriculum was sacrilege. It was as though the "solids" were not man-made, but had been handed down from on High.

When all American youth came to school, there were many who not only did not want this curriculum, but were also not able to understand a word of it. These were good American citizens, but different. Since we could not change our student body, it seemed that we would have to change the curriculum.

This we have done in part and regretfully. We have resorted to patch work; we devised many courses that are not "solid," but which serve as good places to stand some youth while the real education went on for the

others in the regular courses. We could not dispose of all our new people in this way, so we watered our subject matter down, thinned it out. In some places we tried a new approach for the learners, whereby we attempted to fit the school activities to the needs, interest, and abilities of the individual child. This effort, though it seems sensible, has been small in comparison to the whole. For the most part, the original curriculum, in form, if not entirely in substance, has withstood the onslights of the multitude. It has proved itself to be one of the most static features of our culture during the time when the rest of the world has changed so much that it is scarcely recognizable.

I believe that adopting education for all has had more impact on the schools than any philosophy or any of the perennial arguments about what the schools should be doing. Teachers and administrators have tried their best, in most cases, to hold the academic line in the face of an onslaught. They are subject to criticism, not because they have not tried heroically to hold the line, but because they have not changed their basic position in a changing culture.

What We Now Know About the Learning Process

In addition to being beset by urbanization and mass education, researchers have been probing into the nature of learning and how it takes place. Many of the new findings, arrived at by scientific method, tend to show that even when we had the small school with the selected student body, our teaching methods were not in keeping with the best ways of learning.

We know now that one learns in the light of his own experience, and that he cannot learn without experience. We used to think the learner was simply perverse if he did not learn what we thought he should.

The individual learns best when he is involved in what is to be learned—when he has been consulted and has at least given consent to the enterprise. This involvement needs to be in the thing itself, not for some outside reason, such as a grade or graduation.

This means that the student learns best when he is ready to learn—not necessarily when the class comes to the chapter in the book. Being ready simply means what has been said above. He gets ready by gaining the experience needed to have something to hitch onto, and by becoming involved. Readiness does not mean willingness. He may be ever so willing, but he cannot learn without adequate previous experience and maturity.

The student learns best when his total organism is involved—when he has an opportunity to do more than look at a book and engage in purely mental activities. Not that he cannot learn anything from a book, but the amount of learning and retention is limited if there is no further involvement.

It is easy to see how these new findings in the nature of the learning process play havoc with the materials and methods of the old school. It

is very difficult to teach the far-away, the obscure, the abstract to most young people. None of the old methods, where knowledge is set out to be learned, conforms to what research tells us about learning.

A Real-Life Climate for Learning

Many problems have beset secondary education. A changed role, vast numbers, students unsuited to the offerings, lack of facilities, need for changed methods—these will doubtless make the teachers welcome the advent of outdoor education and school camping. Outdoor education is not now a large part of any school program, but it is already established in a good many places. It has proved its worth. Enough records have been kept so that a respectable account of what has happened is available.

Let us consider some of the values of outdoor education through school camping, which seem to be one of the most effective means, although many of the values are present in other outdoor settings. A class or group of children go to a campsite where they live together, eat together, sleep in cabins, and explore the outdoors together. They are accompanied by their teacher who becomes a part of the life thus lived. So far, this plan for outdoor education, like many of the other good things of life, has been, to a great extent, part of the elementary, rather than the secondary, program. The high schools have had some experience with it, and it is hoped that they will have more.

There is great value in the subject matter learned in the camping situation. It is good for city youth not only to be told how to plant a tree, conduct a fish survey, or build a bird refuge, but also actually to do these things. *It is the involvement of the total organism*, so valuable for learning at its best. To contrive such a learning situation in the classroom is difficult.

Implication for Citizenship

There are other learnings, however, which I believe far exceed in value the mere learning about the outdoors, important as this is. Here youth has an opportunity to *learn cooperation in an entirely new dimension*. This is an important lesson for urban youth, who live in a society so close-knit that it is the most cooperative in the history of mankind. The closer people live together, the more important it is that they learn to cooperate. In the camping situation, the need to take one's fellows into account is so obvious that we do not need to preach about it. The dormitory, the kitchen, the dining room, the recreation—all require the cooperation of everyone. This is not abstract; it is not idealogical; it is simply there. A situation exists; it is not invented. Cooperation has a survival basis in the camp which is more difficult to accomplish in the classroom. Learning how to relate one's self with others is probably the most important learning one can have for our modern culture. One scarcely can do anything these days without the involvement of other people.

With cooperation comes *responsibility*. Again this is automatic—makes sense—in the camping situation. Problems and tasks do not have to be invented—no cows have to be bought—to make the tasks real. If the members fail to carry out their responsibilities, the group simply does not eat, sleep, or play. This is the way responsibility was taught before we became urban. If it appears that youth is not as responsible as in the days of yore, it is due to the fact that they have not had the same opportunity to learn responsibility.

Usually a group establishes a form of self-government which not only highlights the lessons in responsibility, but also gives *experience in democratic control*. Through this device, youth, themselves, establish the rules under which they will operate. Having established the rules themselves, they are not inclined to break them. In camp, I have seen young people deciding what rules to follow with regard to smoking, dining-room etiquette, at what time lights should be out at night, and many other items. I have also seen boys who were considered to be delinquents in the city become cooperative and even assume constructive leadership roles in an outdoor environment.

If there are those who think that youth, given an opportunity, will not construct a good society, we have ample evidence that this is not so. We have seen proof, again and again, that youth desires a good society as much as adults. If they err, it is on the side of being too strict with themselves. When youth break rules, it is the other person's rules that are broken, not those which they had a hand in making. In this, youth are very much like adults. We, too, have a tendency to disregard rules made by someone else and in which we have no part.

Youth, in camp, get a *new concept of freedom*, where freedom within the social situation is achieved. Youth do not want to do "just as they please." This is a low-level freedom, which they see will not work when other people are involved. If they wanted this low-level freedom, they would not make rules of conduct. The camping situation gives them a natural opportunity to learn that freedom in the form of license to do "as they please" is limiting in its nature. They learn that, by giving up freedom to do "just as they please," they achieve freedom on a higher, more effective level.

Roots of Our Culture

A great and rather undefinable value in outdoor education is that the city youth gets an opportunity to *relate to the earth and sky*. City youth seldom see anything that is not man-made. Sidewalks, curbs, streets, buildings are all in straight lines, but nature never uses a straight line. Even the parks are laid out and planted according to man's notion of what nature might devise. Research does not reveal what it is that causes man's spirit to expand when he comes in contact with the earth from which he sprang. No one who has ever seen a sunset or felt the warm earth of spring under his feet can deny that something enhancing to

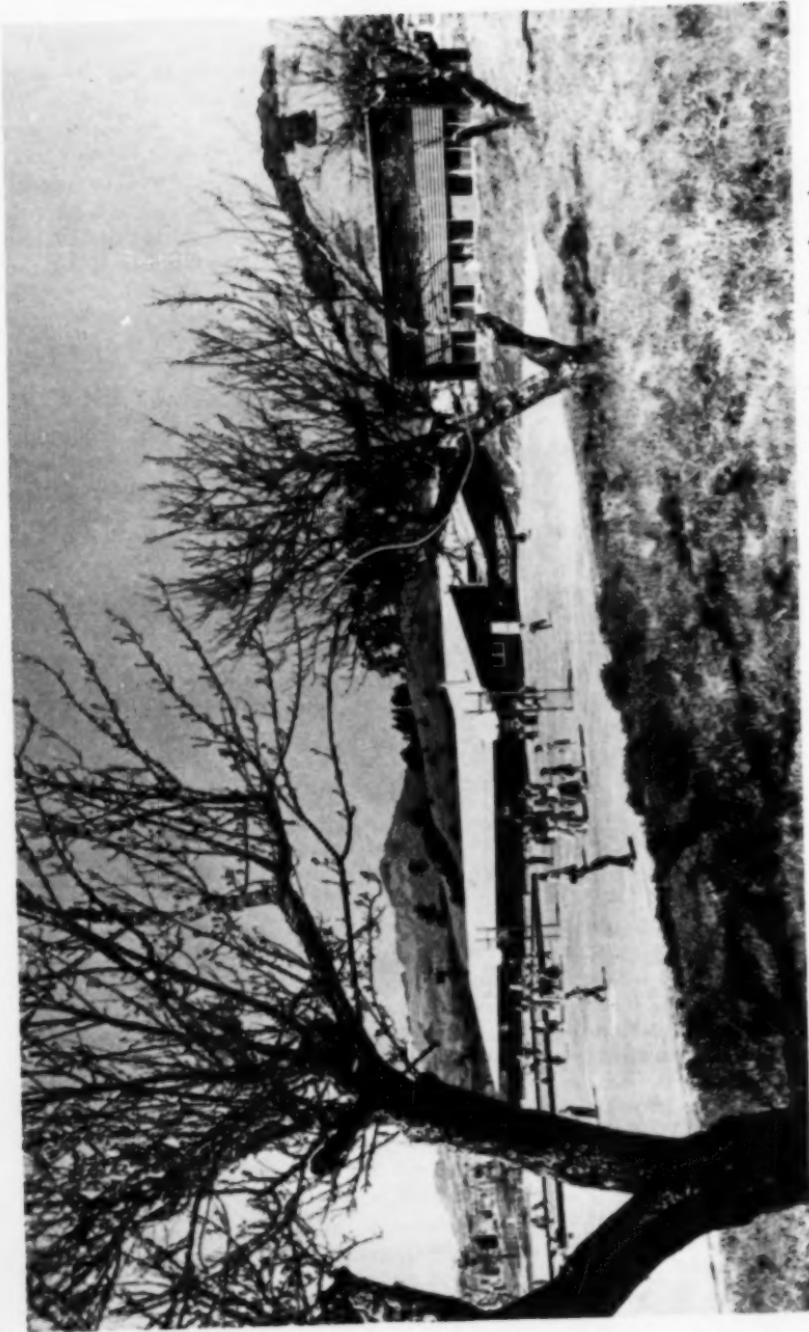
human development exists here. This is doubtless the reason the deer hunter, the trout fisherman, or the bird shooter gets a wild look in his eye at certain times of the year and hies himself to the woods. He does this at enormous cost to himself in money and discomfort.¹ He eats food he would not touch at home, sleeps under conditions he would ordinarily consider torture. It is not for meat that he does this, although he may stoutly deny this statement. "Progress" has long since settled this matter for all of us. Modern man can get better meat, and more of it for the money within a few blocks of his home. It is rather the call to nature and to the earth that spurs him on. And he is glad—counts it worthwhile—even though he brings home no game and is pained in body and in purse. He has satisfied a yearning beyond pain.

So it is with the city youth. We have observed personality changes for the better when city youth encounter and commune with the earth. There is no substitute for this in the city situation. Many thousands of our city youth never get the opportunity to know what communing with nature means. Sometimes research may be able to tell us more about what happens when one gets an opportunity to relate himself to his earth, but that changes do occur seems indisputable.

Outdoor education in a camp setting need not be as expensive as it appears at first glance. Many school plants are now being built. Part of the plant could be at a nearby place where woods and water are available. We have to begin to think of the school as serving the needs of youth before we can see a different school plant. With planning, both in building and in curriculum, the program could be devised so that the campsite is an integral part of the school system. The outdoor program, then, would be carried on with the camp operating as just another part of the school plant.

I see outdoor education as significant because it is a part of the curriculum. It takes place on school time. It provides opportunity for returning something to children that has been taken away by urbanization. It is in keeping with modern research on the nature of the human organism and of learning. It gives some opportunity for city children to see the earth, to live cooperatively and democratically, and to learn to assume responsibility. It even provides an opportunity to live creatively for a time. And I believe that creative living is the best way to learn how to be a part of a changing world.

¹ For a really adequate statement on what our sportsmen will endure, see "Back to the Bush," a chapter of *Literary Lapses* by Stephen Leacock.



This school, adjacent to a park area, provides excellent opportunities for outdoor education.

3. THE COMMUNITY SCHOOL THEORY AND ITS IMPLICATIONS

Modern Education Has Stressed Formalism

THE idea of "school" is irrevocably linked in the modern mind with "formal education" rather than with "complete education" or with "human growth and development" or with "better community living" or with "community development." The very list of alternative connotations is shocking. Laymen and professionals alike normatively respond to "school" in much the same way. Even the present-day products of our best schools of education are usually prepared only to administer a school of formal education. Their virginal ignorance of any other concept of school or school program is a logical result of their upbringing.

Formal education, as it is known in the modern world, is a post-renaissance concept based on a modern philosophy. From the time of the emergence of Western Europe from the Dark Ages, western man has been concerned primarily with becoming universally literate. The representatives of the universal western church under the Papacy and, later, the reformers following Luther and Melancthon have brought western civilization to a high level of literacy. The written word, whether it appears in the Holy Book, the novel, or the science textbook, is no longer the possession of privileged classes such as the clergy, the educators, the writers, and the rulers.

This emphasis on literacy and formalism has left its mark. The completeness that characterizes most systems of tribal education has been lost. Formalism has been over-emphasized. Even people interested in education in the out-of-doors often feel that they must formalize their procedures unduly. A field trip or a camping experience is a complementary (not a supplementary) experience to the experiences that a given pupil has in the classroom. It is merely an expression of completeness in education.

Formal Education Tends Toward a Narrow Concept of "School"

Adapt or perish! This principle of adaptation is half understood by both peasant and savant. But it is not always applied. This decade is witnessing the passing of a generation of rural fathers and mothers who have parented urban children. Like the mother hen who sets a clutch of duck eggs, these parents don't know what to do about the offspring. Boy Scouts, Cub Scouts, Bluebirds, and Little Leaguers are the results. The school is as much at a loss for a line of action as are the human parent and the mother hen.

Adaptation in the anthropological sense may seem to be an academic issue—but it is hardly that today. Kaleidoscopic social and technical changes indicate that a race for survival is on. Survival of the citizen and of the United States of America is discussed in every newspaper in this country every day. Survival kits are essential equipment for the housewife as well as for the soldier. There is even erroneous talk of "survival education"—another abusive cliche.

The Community School Theory Met a Philosophic Need

No people ever entered an emergency more unprepared than were Americans in 1930. Both individuals and institutions were caught unawares. The school as an institution was unprepared. True, it had broadened its curriculum in the ten preceding years, but it was not community oriented nor was it oriented to change. Out of the emergency came a new and useful adaptation of educational theory. It was seen that education should be oriented to the *realia* and conditions of a community. Here was a concept having to do with the *purposes, administration, and services* of a school big enough to meet the need. This concept gave and is still giving life and broad purpose to the modern American school system. The community school theory represents a major philosophic advance for modern education the world over.

Specifically, this broad cultural concept of "school" makes way for a complete education for each individual rather than a narrow, partial, mechanistic education such as is represented by a narrow interpretation of formal education or an equally narrow interpretation of vocational education represented by the apprentice education given to the educationally under-privileged today.

Those interested in the "extended classroom"—a good community school term—should rejoice over the recent development. The community school creates the climate and the opportunity for education out-of-doors or for anything else that is good and wholesome in education.

*The Community School Operation Is Based
on Physical Resources, People, and Skills*

A community is based in one sense or another on land, water, and other physical resources. It also has a technical system based on knowledges, skills, and tools. The individual, young or old, is concerned with learning to operate the technical system and to live with it in all of its implications. In one sense, people are in themselves the chief resources of a community—hence the importance of growth and development.

*Community School Administration
Is Cooperative Administration*

The typical community has a multiplicity of agencies. These agencies have many resources and programs. The school as a major agency is in a key position because its chief business is learning—and it is learning that begets community development. Gradually—and, indeed, rather rapidly in recent years—the need for cooperative planning and coordinated operation has been recognized. Lewis R. Barrett has pioneered in community planning and coordination as is indicated by a number of his survey results. The American Academy of Social and Political Science² has produced a scholarly analysis of the problem. A multi-disciplinary group has helped produce a guide.³ *The School Executive* has produced an ex-

² The American Academy of Political and Social Science. *The Annals—The Public School and Other Community Services*. Volume 302, November 1955. Philadelphia 4: The American Academy of Political and Social Science, 3937 Chestnut Street.

³ Koopman, G. Robert. *My Town*. East Lansing, Michigan: G. Robert Koopman, 625 Butterfield Drive. March 1956.

cellent model.⁴ Multi-disciplinary groups of scholars are increasing. Examples of partial coordination abound in American communities. The essential principles of cooperation have been clearly recognized. Those interested in fields such as education out-of-doors should feel free to move forward on the wheels of cooperative planning.

The Community Curriculum Is Based on Adequate Categories of Opportunity

The concepts of the *community curriculum* and the corresponding *categories of opportunity* are essential to a cooperative community program. The former may be defined as "*the community curriculum or the sum total of all of the planned and contrived learning experiences of the community, of the impact of all of the natural and man-made resources of the community, of all of the supervised education, recreation, and group work in the community.* It refers to all of the creative learning experiences of the people of a community. It is a community curriculum in the sense that it grows out of the needs, interests, resources, and conditions of the community. It is a curriculum, thus it is *planned* within minimal limits. It is planned and thus it requires a marshalling of resources and facilities, each one in relation to the other."⁵

The categories of opportunity are broad and range from:

- "1. The opportunity to participate in a broad, thorough, systematic, and continuing education program"
- to
- "9. The opportunity, for growing boys and girls particularly, to be associated together in a life in the outdoors and learn the skills associated with this type of living, and learn of the habits and beauties of nature through contact with them and with the aid of organization and leadership peculiarly fitted to this purpose."

Program Planning Is the Crux of the Process

Creative program planning is essential to any activity. Such planning should involve all of the agencies involved on a friendly, helpful basis. Such planning is difficult to achieve, but in its absence the competitive, wasteful process of programming is bound to develop. Such programming results in the waste of the community dollar and the deprivation of the most needy individuals. Every community survey uncovers much such waste and deprivation.

Extending the classroom into the out-of-doors demands the use of many resource people and many physical facilities. It seems axiomatic that such programs should be based on cooperative planning.

Cooperative planning cannot proceed without data about need. Such data should in this instance be arrived at by the cooperative action of many agencies. They should be pooled in the process of creative program planning. The data should range from needs of children of all ages to the needs of families and organized groups. Too often community programs in the camping and similar fields are based on the "baby sitting" philos-

⁴ Random Falls.

⁵ Koopman, G. Robert. *op. cit.*

ophy. The vitality and interest being shown by young families indicate the need for programs which will help them to participate with their children in outdoor activities. Such programs should be carried on by adult education centers and recreation staffs and will mean a whole new area of development in many communities. In others, such as Flint, the models for such programs already exist.

Cooperative Planning, Construction, and Use of Physical Facilities Are Essential

As programs and facilities have proliferated, donors, taxpayers, and members of control boards have become more cognizant of the need for cooperative planning and action. Planning commissions, conservation departments, schools, cities, and voluntary agencies have recognized that, in forward planning, communities can no longer afford anything but full use of physical facilities. Park schools are already a reality. Millions of acres of public lands and parks have been made available to community agencies. While it is still desirable for some agencies such as schools, churches, foundations, and youth agencies to own properties of their own, the vast burden of programs is being thrown more and more on *commonly used public facilities*. It is high time that the community dollar be protected from waste in the form of private preserves and darkened school facilities.

Again the only process to be called upon is the cooperative community committee supported with enough resources to secure research data and professional consultation service. In fact, every community should have a long-range committee in this area to assist local authorities and planning commissions and to promote coordination. To date, the engineer and the architect have been forced to build facilities largely from their own ideas due to the failure of program people to do adequate functional planning.

Programming and Staffing Is a Cooperative Process

Programming should be done in terms of the individual child or adult to be served. This principle is demonstrated beautifully in the Random Falls idea, a reprint of an article that appeared in *The School Executive* (March 1956). In actual programming there are two grand phases or processes; namely, (a) making the program plan for a community and (b) the continuous adjustment of the program to the individuals and aggregates of individuals involved. Here it is seen again that coordination is the heart of the process. Community experiments in which staffs from various agencies have provided day-to-day and week-to-week coordination have been very revealing and encouraging. The laboriousness of this process often keeps people from it, but such coordination still must be recognized at the test of any good community program. The problems of initiative, of hegemony, of dominance, and of paucity of staff are real problems and each must be dealt with firmly. In the last analysis these problems will diminish in proportion to the growth of a philosophy and practice of cooperation.

The Basic Staff Should Be Provided by Public Agencies

The problem of provision of a basic staff is fundamental. Again, as in the case of physical facilities, the trend is toward having public agencies with access to the equalizing tax dollar provide the basic or nuclear staff. No rigid scheme will work since the individual agency such as a Boy Scout organization has a unique function to perform. Churches make a unique contribution to human growth, development, and stature. However, many of the means for carrying out responsibilities can best be provided by specialists or by teams of staff members. For example, it seems obvious that a YMCA camping activity would involve many staff people including volunteer parents, group work internees, the sanitarian from the public health agency, the representatives of the park department, the community school specialist in physical education and recreation, and, of course, staff from the sponsoring agencies. The same principle could apply to either field trips or church picnics.

Public Participation Provides a New Basis for Relationships and Programming

The so-called problem of public or community relations practically cares for itself under the community school theory. Interpreting, selling, and propagandizing are largely replaced by participation. A group of parents that participates in an evening volley-ball class for several years is almost certain to insist that plant and facilities be included in a new secondary-school building. The additional cost will be provided. Ends and means become closely associated in democratic living.

As in the case of community relations, the cooperative community program can be lifted from an entertainment level where evaluative data consist of the number of persons attending ball games to the creative level. Once inducted into the process, almost any citizen will thrill to the opportunity to build a new world for the adults and children of tomorrow. Children and teachers who have built a bridge over a stream in a school forest will not be the same thereafter either in their interests or their relationships. Teenagers who have explored James Bay in a canoe are more apt to become interested in geo-physical research than to become comic book readers and shuffleboard players.

As has been previously indicated, a co-planned community program of learning will deal with all ages. The school and other youth-serving agencies will, through planning, come to recognize the needs of other groups. Families will be stimulated to do a better job of education for their constituent members. No cooperative community will ever need a congressional committee in Washington to urge it to build a program for its potential delinquents. No properly organized community will fail to see the needs of the aged and aging. The ghastly tragedy of the passive pensioners awaiting the grave should be a challenge to everyone to build programs of education and recreation for people of all ages.



Eight inches of the most precious substance in America—topsoil.

CHAPTER II

Outdoor Education in the High School Program

I. RELATING OUTDOOR EDUCATION TO HIGH SCHOOL SUBJECTS

WITH certain notable exceptions, the adoption of the methods and materials of outdoor education has moved slowly in the secondary schools. Doubtless the very enormity of the administrative problems of time and space accounts for a large measure of this reluctance. However, American schools, at all levels, have taken justifiable pride in their ability to make the necessary administrative adjustments when they are convinced of the need for newer methods or materials. Witness the time and place modifications made necessary by such courses as distributive education, driver training, and vocational shop. Or, note the temporary schedule changes and travel arrangements made to facilitate the playing of a game of football, basketball, or baseball.

American secondary schools have adequately demonstrated their ability to live with—and profit by—a flexible schedule. They have likewise shown that they can move teacher and pupils to the point at which the desired experience can be had. It may well be said, then, that administrative problems constitute a challenge, or even a quite difficult obstacle, but not a valid excuse for failure to provide secondary-school students with the vivid learning experiences which await them outside the classroom.

If secondary-school teachers, supervisors, and principals *want* to do the job, it can be done. Possibly the fact that so few of them do want these rich experiences for their pupils traces directly back to their own lack of understanding of the richness of the outdoor environment. Teachers who have not, as high-school or college students, experienced the thrill of direct experience learning in the outdoors need help in pin-pointing the relationship of the outdoors to their own teaching areas.

No brief document such as this can hope to explore all of the possible relationship between secondary-school subjects and the outdoors. Only some of the more obvious ones are cited herein. Creative school people will discover many, many more.

Conservation and Outdoor Education

Some people like to say that conservation is the "subject matter" of extended outdoor experiences. Participation in a democratic community, the *living* experiences of students working, studying, and playing together

—these are *method*. Conservation provides something worth while, necessary, and challenging for students to work on and study about. Conservation determines the nature of the recreation which will be available in leisure hours for future years.

What are some of the criteria for viable outdoor education experiences for secondary-school youth?

1. They must provide genuine *learning* opportunities.
2. They must capture the youth's imagination as being worth while.
3. They should provide for growth of the concept of social service—of a contribution freely made for the betterment of the community.
4. They should require constructive work on the part of the student to develop the concept of social service, to provide some work experience, most of all to secure—through personal involvement and contribution—a sense of commitment to the conservation of our natural heritage.
5. They should be real, not simulated, experiences.
6. They should be well-rounded, not reflecting premature specialization.

Academic and Laboratory Goals

What are the goals of such experiences? A comprehensive, detailed view of the natural resources picture? No, but a general understanding of man's dependence upon well-managed, interrelated natural resources. A sharp distinction has to be made between academic study experiences that can develop informational objectives economically and efficiently, and first-hand laboratory experiences in which the main goal is to develop a technique in approaching resource problems, an attitude, a sense of commitment.

The two methods bolster each other. It is a mistake to use one process where the other would be more effective. The student may study types of conifers in a classroom, using printed materials, projected images, samples, and other devices—and develop a meaningful store of information in this way. But the sense of commitment to conservation is established not in this manner, but in the morning or afternoon in which Johnny or Betty and their classmates reseed a hillside which for some reason is not reseeding naturally. Firsthand experiences in the "forest primeval" are necessary to get the feeling of Longfellow's phrase.

Does this mean that attitude-building is the only contribution that the outdoor laboratory makes to conservation education? The answer lies, of course, in the nature of the program to which the outdoor learning situation is contributing.

Objectives Adapted to Goals

The needs of some classes will be general. The social studies teacher will perhaps be more interested in attitudes and understanding—in the sense of well-being that springs from wise use, of desolation from poor

use; in the understanding of cooperative efforts among the resource-users, private organizations, state, and Federal agencies; in the necessity for societies to insure the preservation of their resources. The language arts teacher is interested in natural resources as a source of inspiration, as background and stimulation for reading, as material both for reports and for creative writing. Music and art find similar uses.

In some fields teachers will have objectives that are more specific in nature—that are more directly informational. The science teacher is interested in values derived from firsthand impressions of flora and fauna—in tree identification and growth cycles, in the interrelationship of resources, in environments that are conducive to plant growth and animal survival, in developing a background of reality against which he may later project detail and understanding through vicarious sources. The agriculture teacher wants his class to see how a field is laid out to make the best use of contours. He wants them to note the effects of a grassed waterway. He wants to show the effects of overgrazing, of the use of cover crops, of good drainage systems. The forestry teacher wants his class to have experience in cruising, in planning a sale, in planting, thinning, or pruning. The conservation or general science teacher wants to show the effects of block and selective cutting of timber on wildlife and the planning in a watershed for interrelated resources.

The nature of the need determines the type of experience to be provided. The more general the purpose, the more valuable the extended experience. Where attitudes and understandings are paramount, the need for exposure is greatest. The boy or girl with no direct immediate concern needs time to "browse" in the outdoors, to have guidance in studying the rocks and rills, woods, and templed hills in person. The camp-type experience makes this unhurried, extended exposure possible. Being able to *do* something about it and working to improve the resources give the added meaning, the significance and purposefulness which the secondary-school student requires.

Science

Biology teachers have probably used the outdoors more, and more systematically, than any other teachers. Unfortunately, only a small percentage of this group realize its value.

It is axiomatic in the world of living things that plants and animals are part and parcel of the environment in which they live. Biological facts and principles are poorly understood, if at all, when living things are viewed out of their environmental context. The frog in formaldehyde that so many students have studied is quite unlike the frog on the banks of the creek. The pickled frog has structure but no function; he has no need for food, or protection, or propagation. And these very aspects of his life are what make him a frog. A sound and true understanding of frogs cannot result from such isolated study. How much better it would be to combine the traditional textbook and laboratory work with enough field work to assure an understanding of the frog "in context"!

Environmental studies do not constitute the sole justification for outdoor experiences in biology. Collection trips are another rewarding use of the outdoors. Organized and supervised collection trips can result in much finer things than a mounted collection. Too often, students making individual, unsupervised collections have contributed materially to the destruction of the very things they should be learning to understand, admire, and conserve.

Biology field work to observe seasonal changes also offers rich possibilities. The enormous amount of biology subject matter relating to the field of resource use need only be mentioned here because it is amply documented in the references that follow (see chapter V).

Chemistry teachers might well use field trip techniques in the outdoors when dealing with such problems as chemical elements in soils, community sanitation, and domestic water supply. Teachers of secondary-school physics have frequently used the outdoors, especially when the area of light is related to astronomy and telescope construction. In school camps, many of the basic tools and processes of woods work are among the most simple illustrations of the laws of physics. For example, the use of a cant hook or peavey to roll logs is a clear cut and meaningful illustration of the lever principle.

In the field of vocational agriculture, teachers have rather consistently employed the outdoors as instructional material. Whether in "projects" on the students' own farms or, as is increasingly true, on farms owned and operated by the school, students actually do farm work, planning, and bookkeeping on school time in the outdoors.

School farms and school forests are dealt with more elaborately in another section of this document. Suffice it to state here that school-owned farms and forests serve a three-fold purpose as related to the high-school curriculum: (1) demonstration of good farm practices in the over-all farm program, (2) laboratory observations of specific farming procedures, and (3) actual participation of the students in farm work.

Social Science

Alert social science teachers have long used the methods of outdoor education. Trips to a ghost town or an abandoned farm can give high-school students of history or modern problems a keen insight into the changing patterns of America's development. An hour or two spent at an excavation site can demonstrate more clearly than thousands of words the slow, tedious methods by which much of history is literally dug out.

A bus trip through a farm area can illustrate the problems faced by American farmers. The sight of eroded fields and muddy streams can point up the social importance of one of America's great problems—wise use of our natural resources.

Secondary schools that have access to a camp are fortunate. In camp, the social science teacher can actually build the kind of social environment about which he is teaching. Students can plan and "live" a pioneer

day or can, in the day-to-day scheme of camp living, practice pure democracy, representative democracy, or—to illustrate its disadvantages—possibly a period of anarchy or dictatorship.

Physical Education

The field of physical education with its allied fields of recreation and health probably has more opportunities in the outdoors than any other curriculum area. Whether its immediate objective is that of healthful exercise and fun for its present value or that of providing students with life-long recreational skills, outdoor activities provide a simple and economical answer. Here are invigorating activities in which the student can find challenge now and in which he can engage as long as he lives. Here are wholesome activities for the individual and ones in which his whole family can participate—now and in the future.

A number of secondary schools have approached outdoor education through the rather simple device of adding instruction in the skills of casting and shooting. These activities are almost ideal in that they fit neatly into existing administrative structures and are not prohibitively expensive. Simple instructional procedures in fishing and hunting enable youngsters to begin, safely and efficiently, recreational activities that are life-long in value.

The formation of Outing Clubs in junior and senior high schools appears to offer other great values. Such clubs, long a valuable addition to the college scene, have been largely ignored in the public schools. In outing clubs youngsters learn the simple skills of hiking, outdoor cookery, and general comfort and "at-homeness" in the outdoors.

Family camping, while almost totally unorganized and, by its very independent nature, a poor subject for systematic, scholarly study, appears to be the major recreational development of our age. Literally millions of Americans are flooding public camp sites every summer in quest of cheap, simple outdoor recreation. Outing clubs provide instruction in the skills so sadly lacking among too many family campers.

One of the real puzzles to an observer outside the physical education field has been the almost total lack of attention by physical educators to that one physical activity in which almost everyone engages almost every day of his life—walking. Possibly hiking clubs—or simply walking some place while in physical education classes—promise an answer. Americans, emotionally tied to automobiles as they are, don't walk enough. And they are missing one of the most relaxing and best conditioning exercises there is. It is logically the job of physical education to re-open this most simple and healthful activity of all to youth.

Language Arts

On the surface, there appears to be little or no relationship between language arts and the outdoors. A closer look, however, reveals a real and needed function of the outdoors in teaching youngsters efficient and creative use of language. Teachers of composition have long known that

a pupil must have real experience, experience which has meaning to him, before he has anything to write. Even the most imaginative writer starts with something real. Directed outdoor observations, possibly in connection with other courses, can provide this needed reality. Teachers of language arts might well make use of the experiences pupils have had on, say, a biology field trip or an outing club hike to provide the subject matter for descriptive writing.

The outdoors has, since mankind first wrote words, provided much of the finest of inspirational, creative writing. The alert teacher of literature or composition shares this rare experience with his pupils. Just as the art teacher takes his pupils outdoors to get vivid, impressive firsthand experience, so will the imaginative teachers of language go outdoors with his pupils for inspiration. It's there for the asking.

Arts and Crafts

Secondary art pupils will find in the outdoors, in class-hour excursions, or on extended trips a wealth of visual impressions. The translation of these impressions into the various art forms could readily become the very center of instruction in the graphic arts.

Materials found in the outdoors—clay, grasses, interesting forms in knots or driftwood, dried flowers, or seed pods—the list is endless—can add breadth and depth to the secondary art courses, which have too often been simply offerings in drawing and painting. The discovery of beauty everywhere and the creation of beauty from even the unbeautiful might well be the objectives of taking art outdoors.

Mathematics

Geometry, that branch of mathematics which had its beginnings in an outdoor problem—re-surveying the Nile Delta after the yearly floods—probably provides the most meaningful relationship between mathematics and the outdoors. Actual use of geometric principles in surveying, measuring, and estimating can add life and reality to a sometimes dull subject. The history of mathematics is one of mankind's most thrilling achievements. By taking pupils back where the problems first existed—on the land—the creative teacher can share the heroic past with today's students. And, as a bonus, he will get meaningful insights impossible with regular textbook instruction. Geometry can become a thrilling exploit into the environment instead of dreary "learn-it-because-you'll-need-it-some day" routines.

Modern youngsters, reared away from the land, have but hazy notions of our common measures such as yard, rod, mile, or acre. These are real problems in the outdoors. The pupil learning to use map and compass deals with them in a situation charged with reality. Estimates begin to come easy when there is real need for them.

Homemaking

Homemaking cuts across a number of subject areas when it deals with the outdoors. The simple example of that great American pursuit—back-

yard cookery—illustrates the point. Here is cooking, clearly in the home economics area, blended with relaxing fun, just as clearly in the area of recreation. And, if the family wants to be creative about it, it can project into geography and history by experimenting with outdoor dishes of other lands and times. It can design and build its own barbecue pit or smoke oven, thus impinging upon industrial arts.

If the teacher of homemaking is interested, as certainly she should be, in providing instruction in wise and healthful family use of the outdoors, she will deal with problems of proper shoes and clothing for hikes, picnics, or family camping trips. She may even go to the next step and explore with her pupils problems of economical, well-balanced, and easily transported food. Shelter, beds, and bedding also constitute legitimate and interesting problems to be solved.

An interesting possibility in the field of homemaking is that of designing a number of outdoor "home projects" for the students. One of homemaking's major objectives is that of "fostering better family relations." What better way is there than that of helping the family to better ways of family recreation through outings, picnics, backyard cookery, or even family camping trips?

Core Curriculum

All of the above has assumed the traditional subject matter organization of the high-school curriculum. In those schools that have departed from such organization, the initiation of outdoor education should prove an easy task. The broad-area organization of subject matter that is characteristic of the core curriculum and its large time-block scheduling are both favorable to outdoor activities.

Outdoor problems seldom fall neatly into a given subject matter area. Most often they cut across two or more areas. Curriculum organization that is problem centered can deal with such multi-subject problems with a great deal more facility than can the more generally known subject-matter organization. It is probably for this reason that outdoor education and school camping have been more warmly received by core curriculum schools than by others.

Co-curricular Activities

In addition to the various curriculum areas cited above, attention should be directed to that area of secondary education that is least bound by traditions, as time and space problems, co-curricular (or extra-curricular) activities. Conceived originally as a broadening or enrichment feature of the school offering, this area lends itself most readily to the expansion and development of outdoor activities. The very fact that many co-curricular activities are scheduled outside the school buildings and after school time makes for the much wanted flexibility. A partial list of the possible organizations are: hiking club, outing club, bird watchers, outdoor chefs, astronomy club, telescope builders, and gardeners.



Outdoor education offers opportunities for a variety of co-curricular activities.

Teacher-Pupil Relationships

One of the significant benefits that comes to teachers and pupils who share in the vivid and adventurous experiences that outdoor education offers is that of a better understanding of each other. All too often, the teacher is viewed by his pupils as a bookish, sedentary person. A teacher who sees his pupils only in the classroom can just as readily conceive of them in a single-faceted manner. The many sides of personality which are almost automatically drawn out when teachers and pupils share a real experience may never be seen in the more restricted atmosphere of the classroom. Home-room teachers and guidance counselors, as well as the pupils' subject matter teachers, could benefit from such relations. This is the "bonus" factor in outdoor education for secondary-school youth.

Outdoor education in the secondary school is still largely an unexplored and uncharted area. It remains a challenge to adventurous teachers and administrators. There can be no doubt that great values are inherent in it for secondary-school youth. Neither can it be said that the job cannot be done. What else do American schools need?

2. SETTINGS FOR OUTDOOR EDUCATION

USE of the outdoors for more specific learning activities may involve either extended experiences or field trips of relatively short duration. Much depends upon the area in which the school is located and the resources that are available within easy traveling distance. Often large cities find the extended experience necessary for all such activities, since too much time is taken for transportation alone on the shorter field trip. In some cases schools maintain their own farm or forest within easy distance of the school. Sometimes part of the school site has been planned as an area for learning about natural resources. In other instances a location remote from the immediate school community has compelling values to recommend its selection. School camps have proved one of the most effective and practical means of making such outdoor learning opportunities available.

School Camping

For almost two decades camping has been or become a part of the educational system in many communities. The number of school camps is increasing steadily. Stimulated by pilot programs by Life Camps, Inc.—now the Outdoor Education Association—and by local and state experimental ventures in Michigan, New York, and Washington and aided by the W. K. Kellogg Foundation, upwards of five hundred school districts in half the states now use camps for learning experiences in the outdoors; for it has been clearly proved that certain learnings can be acquired more

quickly and effectively in a favorable camping environment than in school.

A number of schools have year-round operations, while many more use camps for several weeks throughout the school year. While the greatest growth has been in the elementary schools, an increasing number of such camps are reported at the secondary level. There are now enough documented experiences of this type of outdoor education to make it relatively easy for high schools to initiate pilot programs in most sections of the country. Consultant services and materials are available from national and state professional organizations, state departments of education and conservation, universities and colleges, camping agencies, and other organizations to assist schools in school camping ventures.

As a result of much experimentation and evaluation, some principles and guides can be stated that will be helpful in setting up new school camps and in improving present practice.

1. The school camp must be a part of the total school plant. No modern school will be complete unless it owns or has use of a large tract of land for year-round outdoor education activities.
2. The camping activities must be an integral part of the total school program and operated by the superintendent and teaching staff under the auspices of the board of education.
3. Cost of operating the school camp should come from school funds the same as for any part of the school program.
4. Wherever possible the school camp should be planned to serve the community.
5. In selecting a campsite, it is important to secure a large enough tract of land to provide not only for the camping program, but also for other phases of the outdoor education program. Schools may need to purchase their own property or may make arrangements for use of county, state, or Federal land.
6. Standardization of camp structures should be avoided.
7. Individual growth and development takes place best when campers are divided into small groups of seven to ten each for participation in the many camp experiences.
8. In most parts of the country, living quarters will need to be winterized. During warm seasons and in some parts of the country, living quarters can be in canvas-roofed types of shelters, many of which can be constructed by campers and staff.
9. The school camp has a unique opportunity to bring about total educational growth of youth through small group living and through putting them into close touch with their natural surroundings.
10. The camp program should be planned by the teachers and students. It is best to use the small group process in planning and carrying out the program. This program would include arrangements for living, menu making, food marketing, cooking, sharing

of all duties and work, meeting weather conditions, maintenance of shelters, forestry, conservation, and many kinds of trips and explorations.

11. The camp program must emerge naturally out of the local school situation and must be planned and conducted so that:
 - a. Every camper participates.
 - b. Each camper has the opportunity to discover himself, his place in his small group, his contribution to it and to gain better understanding of how people live and share together.
 - c. Its content is centered in the out of doors; it should give campers a fuller understanding of our natural resources and how to use them, and teach them to solve some of their own problems connected with man's basic needs for food, clothing, shelter, group living, and spiritual uplift.
 - d. It is motivated by causing campers to do for themselves and solve their own problems; and to use nature materials effectively and according to good conservation practices.

Initiating a Program

The initiation of a school camping program is not unlike other curriculum innovations. Creation of an outdoor education committee composed of representatives of the teaching staff, students, and citizens has been found effective. Whatever study plan be envisioned, preparations should include the following:

1. Securing information concerning other outdoor education programs through publications, films, and visitations if possible.
2. Making an inventory of community resources available for leadership, materials, and facilities.
3. Studying community interests and needs to determine how school camping can make a unique contribution to the curriculum.
4. Recommending a plan of action to the school administration, beginning with a proposed pilot program.
5. Selecting one or more classrooms or activity groups for the pilot effort where there is already interest and readiness on the part of students, teachers, and parents.
6. Providing inservice training for prospective staff members through visitations and workshops held at the setting for the camp.
7. Making careful pre-camp planning with both students and parents concerned in the classroom groups involved, and making full use of available consultants.
8. Setting the stage for interpretation and evaluation of the pilot program as a basis for determining a long-range plan of action.

Plan of Operation

The general plan now employed is for students to go to camp together by classrooms accompanied by their teachers, usually for a period of five

school days, as a regular part of their school curriculum. In secondary schools, the camp group may consist of subject matter classes, grades, home rooms, general education units, or special activities that use available camps to achieve general or special objectives of the school program.

The home assumes the cost of food and maintenance, while the board of education provides instructors, materials, equipment, transportation, and special services. Community organizations such as parent-teacher associations and service groups often assist in the initial efforts by way of supplemental financing and other resources.

One of the most significant aspects of school camping is the fact that students and classroom teachers plan the experience cooperatively, go to camp together, and thus relate outdoor learning to the purposes and objectives of their community school. Resource leaders from community, state, and national agencies and organizations are used extensively under the direction of school authorities to enrich the program in these unique "outdoor classrooms." Available camp facilities, public and private, are being leased or rented for this purpose, and in some instances school districts have developed structures in the woods on land controlled by their own or another public agency.

Experience has demonstrated that qualified teaching personnel can do a creditable job of teaching in the camp setting with appropriate in-service training. Those responsible for directing the program are usually chosen because of previous experience and training. The combination of teacher preparation and school camping experience as described elsewhere in this book has been advantageous both to the school camp program and as leadership training.

Program

Program activities in school camping are many and varied. Beginning with basic learning situations involving food, clothing, and shelter, there are unique opportunities for valid experiences in group living, cooperative planning, and solving community health problems, not least of which grow from the favorable climate for student-teacher relationships. The outdoor activities within reach are unlimited and can be tailored to the interests and needs of the student and to classroom objectives.

Direct experiences in the outdoors with implications for many school subjects—conservation, health and safety, citizenship, to name a few—make the camp setting a strategic place in which to attain the goals of secondary education. Many outdoor activities possible in the school camping program are described in detail elsewhere in this book.

The use of camps for extended classroom experience is a simple and logical development in curriculum. With careful planning and modest beginnings, it can be initiated without excessive cost or administrative difficulties. With the camp setting as an added resource for the achievement of desired educational goals, the process is simply one of moving

into the outdoor laboratory, which constitutes a logical development in general education in a community school.

Work Experiences

One of the great potentials related to outdoor secondary education programs, that may be tied in with the school's camp program either for a setting or as an objective, is in purposeful work experiences on the land. Reminiscent of the CCC, secondary-school leaders should give serious thought to conservation-centered activities that challenge the interests and imaginations of youth while they provide new avenues of learning.

Work-learn camps embodying community service could be designed on the same principles as cooperative programs in vocational education. The Friends Work Camps; Camp Woodland Springs in Dallas, Texas; the Michigan Work-Learning Pilot Program; Camp Palomar, San Diego, California; and others suggest ideas that could be incorporated in a *community school version of the CCC*.¹ Many educators feel that the secondary school could and should provide these kinds of experience for older youth, rather than leave it for other agencies to assume education's responsibility in times of crisis.

Summer Activities

The projection of secondary-school programs into the summer vacation period opens up a whole new area to outdoor education. Already a number of high schools are sponsoring work camps. Farm labor is recruited, transported, supervised, and chaperoned by members of the high-school faculty. In addition to offering an extremely valuable working-earning-saving experience for the high-school youth, a work camp provides for them most of the fine social learnings of any other camp. With adequate safeguards against exploitation, many high schools should move into this area.

There is no good reason why high schools in economically favored areas cannot approximate the open-hearted beneficence so well illustrated by the Quaker Work Camps, where adolescents actually pay to help a war- or disaster-damaged community heal its wounds or to improve community health and recreation in less favored communities. These youngsters pay their own room, board, and transportation and joyfully work to help less fortunate people build, say, a community swimming pool or a playground.

Outdoor Teaching Stations

An outdoor teaching station is one that is particularly rich in opportunities for observing and experiencing real things that contribute to and vitalize certain learning experiences that the teacher or leader is attempting to teach and make meaningful to the group.

These outdoor teaching stations are often the high points of field trips and school camp experiences. They are often the main focus of a trip

¹ *A Work-learn Camp for Older Youth* published by Lee M. Thurston, State Dept. of Public Instruction, Lansing, Michigan, 1950.

outside the classroom walls, especially where motor transportation is involved, which is often the case in metropolitan areas.

There are a number of factors to be considered in choosing an outdoor teaching station. It should be close enough to camp or school to make maximum use of time and economical transportation cost. Before a site is chosen, the teacher or leader must have clearly in mind the concepts and knowledge that he wishes to teach or vitalize. The choice is then made of an area that has the most features and elements to help him meet his teaching objectives. The closer together these features are, the more efficient will be his teaching. The safety and the ease with which teaching control can be maintained should also be considered. Once a leader has in mind his objectives for teaching in an outdoor area, he can use the knowledge of resource people to locate possible sites nearby. A county forester, for instance, is usually familiar with the forest areas and can give invaluable leads on sites that would meet the leader's teaching needs.

Once the outdoor teaching station has been selected, the leader must familiarize himself with the area by exploring it for teaching possibilities, using specialists to help him interpret what he is seeing. If he is concerned with natural science and conservation, a good background for the teaching station can be obtained by checking with state agencies concerned with the management of natural areas as it relates to forests, water resources, soil, wild life, *etc.* The leader must then tie this information together as it relates to the specific area and to the grade level of the group with which he is going to work.

Resource People

An outdoor teaching station such as a dam, bird sanctuary, park, forest demonstration area, game farm, or fish hatchery, is usually easier for the leader to develop because his main source of information can often be the person who has charge of the area. However, the leader must still keep in mind his teaching objectives and seek information that will aid him in accomplishing them. If he uses the person who cares for the area to help in the instruction, he should be sure that he has clearly stated his objectives and has been specific in his requests in what he wants the resource person to do and cover. A resource person who has spent his life studying a particular field should not be asked to tell or demonstrate all he knows in the short time that he will be with the group, but he should be given definite questions in the areas of work that will help meet the specific objectives of the outdoor experience the group is having.

Outdoor teaching stations that are chosen to give experience in investigating evidence of man in the past can be of value in vitalizing history, social science, and the changing use of the natural environment by man. These sites are numerous in almost any community—places like abandoned farms, unused roads, farm land reverting to forests, old cemeteries, Indian sites, old quarries, and old water mills. On sites of this type, town histories, old residents, back files of local newspapers, and

careful exploration of the site will furnish adequate information for making history and man's way of life in the past come to have vital meaning to the group exploring such an area.

An outdoor teaching station where actual work can be done in the process of discovery or learning is probably the most exciting kind of learning experience from both the standpoint of the leader and the group. Clearing of forest trails, pruning, planting, weeding in a forest, reestablishing foundations by digging, discovery of old bricks, bottles, parts of farm implements, household utensils, and studying their implications are real and vital learning experiences. Using a few of the fundamentals of archeology in exploring and interpreting Indian sites, mounds, etc. can contribute to valuable concepts not only of history but also in scientific methods. Care should be taken that sites of this type are checked with the archeologists of the state so that there is no chance that sites of scientific value are disturbed. If the leader is very fortunate, he may be able to have his group do some work under the supervision of a scientist and help make a real contribution to the knowledge of the area.

Outdoor Teaching Methods

A leader must develop good teaching methods if the use of the outdoor teaching station is to be valuable. The lecture approach is probably the least valuable and the one that the leader has the greatest difficulty trying to avoid. A good leader has already acquired a background of knowledge about the area. It is almost irresistible not to tell immediately what he knows to the group. This takes away the thrill of discovery and the need to do any rational thinking on the part of the group.

A good method for an older group is the use of work sheets with leading questions to be answered and the use of guides in the investigation toward the objectives and concepts of the trip. Investigation without intelligent direction from the leader will lead to confusion and wasted time as too many blind alleys will be followed. With younger groups, the question-and-answer method is good. Small groups of four or five can explore and answer two or three questions at a time, coming together with the leader from time to time for evaluation and discussion of the answers and to receive new leads for investigation. Sometimes the objective can be to tell a story which is gradually developed by the group as they investigate the site with each individual contributing to it as they are able.

If the site is historical in nature and historical local knowledge has been studied by the group before the experience, the main activity at the outdoor teaching station can be that of discovering and finding evidence that confirms, or, in some cases, questions the written information studied. It is sometimes exciting to try to confirm stories of old residents about old roads, buildings, caves, cemeteries, etc., that they remember. Some outdoor teaching stations, particularly ones where actual work can be done, are the ones to which you may want to return several times, after

periods of study or at different seasons, or after certain things happen such as flood conditions in a flood control area.

If outdoor teaching stations are used properly and are carefully geared to curriculum objectives, they can be a dynamic part of education. Learning requirements for a functioning citizen in our complex civilization are so many that most of them must be vicarious; however, to profit fully from vicarious learning, we must be familiar with some of the direct experience sources from which all knowledge comes. Acquaintancehip in a simple way with the field methods of science, the source materials of historians, and chances to evaluate the things seen, felt, and experienced can give new and more valuable meaning to the information and ideas so conveniently recorded in books and pictured for us through our audio-visual aids to learning.

School-Community Resources

Nature centers, which may be established under the auspices of various agencies, such as schools, museums, and parks, offer secondary-school students unusually fine opportunities for outdoor education. Usually staffed by trained naturalists, with facilities devoted to interpreting the out-of-doors, such centers serve as the focusing point for the nature activities of a community and serve to bridge the gap between the classroom and the out-of-doors.

A nature center generally contains a building used for meetings, lectures, and study. Displays, books, study specimens, laboratory equipment, and nature craft materials may also be included. Some nature centers also have live exhibits, such as reptiles, amphibians, water life, and small mammals. There may also be bird feeding stations that make possible close observation. Equipment for movies and slides are often available.

The building is usually considered a means of interpreting the outdoor area in which it is located, and any displays are directed toward that end. Relief maps, models, charts, and actual specimens give the students a better understanding of the region and relate what they study in the classroom with what they see in the field.

Doorways to Nature

Nature centers may be regarded as doorways to the nature trails that usually radiate from them. An essential feature of the nature center is an outdoor area rich in scientific interest; and nature trails are a valuable means of entering these areas. Such trails make it possible for visiting groups to participate in field trips under the direction of their own teachers or trained leaders from the nature center. In some instances, labeled nature trails, which can be used either without leaders or with leaders unfamiliar with the particular region, have been established.

Nature Center Programs

The Audubon Nature Center of Greenwich, Connecticut, is typical of a number of nature centers. Throughout the school year, both ele-

mentary- and secondary-school classes are brought to the center in busses, usually during school time. Teachers come with the groups; and sometimes parents or teachers-in-training augment the supervisory staff. The school groups are met at the center by a member of the center staff, a person trained in the natural sciences and having experience and ability in interpreting to groups the varied outdoor resources of the area. Sometimes class groups may be divided into smaller groups so that more personal attention may be given.

The meeting room of nature centers may be used during bad weather when it is impossible to be out of doors. The center director may conduct lectures and discussions relative to the resources of the area at such times. The meeting rooms may also be used by the teachers for review and evaluation after trips into the field.

Another nature center that has been used heavily by school groups is the Little Red School House operated by the Cook County Forest Preserve District of Illinois. Every attempt is made to make the displays seasonal, and, as a result, the same groups of pupils with their teachers may return several times during a year. The naturalist on duty at the School House explains the exhibits and tells groups how to use the nature trails. The trails themselves are self-guiding; that is, no naturalist need accompany the groups using them. The trails are labeled, and the labels are changed as the seasons progress. The exhibits in the building are local in character and are designed to arouse interest in the vicinity and supply information regarding it. So popular has the Little Red School House become that the Cook County Forest Preserve District is planning other similar centers.

The success of the nature center in contributing to the school program depends upon several things:

Interesting and Varied Approaches to Natural History. The more interesting and varied the area in which the nature center is located, the easier it is to make the program of the center a significant one. Trees, flowers, streams, ponds, birds, animals, insects—all can add to the interest of the center. If, in addition, the geological history and human history of the region are in evidence, the center is rich in program possibilities.

Imaginative, Well-Trained Leadership. Professionally trained leaders, competent in both natural science and educational methods, who can help visiting teachers and pupils, are essential. Such leaders will make the most out of the possibilities of the area.

Concentration on the Local Area. The nature center is not a museum in which may be preserved articles of interest from other parts of the world. It is rather a means of interpreting the living world around it.

Stressing of Basic Principles, Ecological Relationships. By indicating examples of balance in nature, survival, conservation practices, etc., the nature center can demonstrate basic principles which give reality to abstractions studied in the school textbooks and relate classroom work to firsthand experience.

Nature Trails

Nature trails may be established in connection with a nature center or may be set up separately in a park, camp, or school yard. Such trails are designed as outdoor teaching devices and should be located where a variety of natural features may be observed. Trees, flowers, birds, animals, rocks, fossils, water life, and the relationship of living things to their environment are among the things which may be brought to the attention of the trail user.

Trails may be unlabeled or labeled and designed for use either with or without a naturalist guide. Trails which are used under the guidance of a naturalist do not need to be labeled. "Self-guiding" trails, which are intended for use by groups without professional leadership, may have labels placed at numerous points along the trail to interpret the interesting features. Such labels should do more than merely identify; they should, as far as possible, tell a unified story of the area. If trails are not labeled, booklets describing the points of interest may be available for groups to use as they walk over the trails.

Nature trails may vary in length from about a quarter of a mile to several miles. A popular form of trail is one which circles an area, returning the user to a point near that from which he started. Another form of trail is the figure 8, so arranged that users may return to the starting point after covering only half the trail if they so desire.

Available Camps

Camp areas, whether they belong to public or private agencies, may often be employed in the outdoor education program. Since most children's camps operate only in the summer time, they are, as a rule, available to school groups during the school year. Increasingly, schools are obtaining the use of camp facilities both for camping programs during the school year and for one-day trips out of doors.

A good camp site has these desirable features for school groups: an environment in which native plant and animal life is relatively undisturbed; and a varied terrain which makes possible a study of forests, meadows, streams, lakes, and the life therein. In addition, many camps have small museums, nature trails, campfire circles, and other special facilities useful to school groups.

Parks

While school science groups might prefer to work in parks or nature preserves where the native plant and animal life is relatively undisturbed, even the small, well-trimmed city park can be used with profit. Such parks may give the students opportunities to study tree, flower, and bird life and to observe environmental requirements for the continued health of each. The small city park, moreover, offers an excellent opportunity to observe the precautions necessary for the conservation of plant and animal life and the prevention of abuse and damage from over-use. Larger parks may offer a variety of services to school groups, such as

museums, nature centers, nature trails, naturalist services, and unusual scientific features.

When a park adjoins the school, the outdoor education possibilities of the school program are greatly enhanced. However, even simple school grounds offer some opportunities. The trees and shrubs around the school and in the near neighborhood are usually sufficient in number and variety to be worthy of study. In some cases, a corner of the school grounds might be reserved for special plantings.

An advantage of school ground science and outdoor education projects, in addition to the ease of observation, lies in the fact that study may take place over various seasons of the year. Another advantage lies in the opportunity to put conservation practices into action and to be able to observe the effect of such action.

Museums

Various kinds of museums may be of service to classroom groups. One is the small museum—set up in connection, perhaps, with a nature center—intended to interpret a local area and containing only exhibits pertaining to that area. Another is the large general museum with comprehensive exhibits from many parts of the world. Some museums are especially designed for children. Other museums are devoted to particular subjects.

Many modern museums are far more than mere centers where objects may be preserved and displayed. They are primarily activity centers, which carry on extensive educational programs, both within the buildings and in the communities in which they are located. Schools fortunate enough to be located near such museums will find many ways in which they can be used: visits to the museums, with professional guidance or with the intention of concentrating on particular subjects; use in the classrooms of materials (films, pictures, specimens, and literature) borrowed from the museums; attendance at lectures in the museums; and participation in special classes or trips sponsored by the museums.

Zoos

There are two main kinds of zoos: large zoos, with animals from all over the world; and local zoos, containing only animals from a limited area. Both kinds may be used by school groups.

Unfortunately most zoos are regarded chiefly as amusement centers. Their educational possibilities are for the large part unexplored. However, they offer an opportunity for students to obtain a firsthand acquaintance with animals and to observe their structure, actions, and habits. Trips through a zoo under expert leadership can be highly instructive.

One means of encouraging purposeful use of zoos is described in *Nature Recreation*, by William Gould Vinal. Each visitor to the zoo is given a sheet of paper (usually mimeographed) containing a number of questions which may be answered either from direct observation of the animals or from information given on labels at the exhibits. Provision



Field trips make learning real.

is made for scoring the answers. Questions such as "How does the tiger differ from a lion?" or "Does the hippopotamus breathe air or water?" encourage observation.

The Special-Project Field Trip

In contrast to the more extended uses of outdoor learning opportunities, there are times when the utilization of very limited amounts of student time for field trips will set in motion chain reactions which permeate and strengthen the conventional program of an entire high school.

The record of this project undertaken by biology classes in a high school serving a medium sized industrial community is cited because it motivated related conservation studies in other school courses. Since biology was a required subject, it involved all students in that grade.

To make biology more real and vital to his pupils, the instructor had set aside time during the fall term to investigate what specific knowledge of biological functions and ecological relationships is required for us to manage intelligently our state's wildlife resources.

Class discussion determined that, for most sections, interest centered upon how to produce better fishing. Specifically, what could be done to increase natural supplies by propagation? What were the minimum environmental requirements for salmonoids? (Apparently the youngsters had been influenced by the thinking of a community rod-and-gun club.)

The instructor then used about two weeks of laboratory study to explore living needs of various fishes in terms of their biological functions. This was linked with class work on microscopic organism (phyto and zooplankton) upon which the fish food chain depends.

A resource person from the fish and game department was invited to come to school for an entire day. Schedules were rearranged to permit all biology pupils to attend a morning assembly, during which a motion picture depicting the propagation of land-locked salmon was shown, and the consultant conducted a general discussion. Subsequently, he met with each biology class in turn to relate these ideas with their laboratory studies.

Biology students expressed eagerness to see for themselves the spawning operation at which fish culturists take eggs from salmon brood stock resident in one of the large lakes, fertilize them on the spot, and transfer them to the hatchery to be reared. Since this required an all-day trip to a distance of about sixty miles, it was deemed impractical to take the entire group. Hence a contest was decided upon.

Selection of Students

Through cooperation with the English department, two essay topics were assigned and the results judged to select about twenty-five boys and girls who would participate:

What is the economic importance of fishing to our state?

What factors are most important to make a lake suitable for salmon?

Parents of selectees cooperated with the instructor to make five cars available for a November visit to the spawning operation. Fish and game department personnel who cooperated with the project included fish culturists, a conservation officer, and the consultant who had visited the school. Students witnessed the taking and fertilizing of eggs. Then they spent more than an hour discussing implications with their resource people. Each school class had designated its spokesmen to secure answers to a prepared list of questions:

Why were the brood salmon kept in the lake?

What did they feed on? How many eggs did each female give? What was the survival rate? Why didn't the state depend upon natural propagation?

What was known about the under-water chemistry and physical factors? What about purity standards? How important were disease problems? What were the mechanics of fertilization; of reproduction?

How much was one adult salmon worth? What did it cost the state? How many fishing licenses were sold each year? Were salmon more valuable than trout; bass? What was the estimated value of tourist business? Where did the fish and game department get money to pay for these operations?

What were the chances of getting a job as a biologist? As a conservation officer? What did one have to know? What should one study in school? What major should one take in college? What college? Were there jobs for girls in conservation?

The field trip group then traveled another ten miles to the hatchery where salmon eggs were being placed on trays to remain until hatched. Students had an opportunity to inspect all facilities of the hatchery and rearing station.

Subsequently, the fish and game department consultant was called back to school for a follow-up visit.

Resource Persons

In the meanwhile the local conservation officer, the sportsmen's club president, and a mill executive had been used as resource people. Now, four months after its inception, the project had taken a new twist. Students were conducting an intensive study of the fishery potential for the river which flowed through their town. While "biology" was still helping, the spring-board was now their social studies classes:

Since this river was tributary to an inter-state giant that flows to the Atlantic, what were the chances of restoring the sea-run salmon that used to frequent its waters?

Whose job was it to control the pollution which their town dumped into the local stream as a result of essential industrial processes?

How important was fishing as compared with other uses of the river? Could you manage to save both?

How many jobs in town depended upon water? Upon other natural resources?

What was the community value of a giant power dam nearby? What was the local responsibility for watershed flood control?

Those are merely indicative of the range of questions which developed from a wildlife conservation problem and led to challenging new school activities. It may be significant that three years later a delegation of

seniors from this same school attended the annual meeting of the Connecticut River Watershed Council.

Outdoor Education Through Travel

Travel camping, such as that sponsored a number of years ago by the Atlanta, Georgia, schools, is another fruitful extension of the secondary school into the summer and into the outdoors. Here is the story of how one urban school system fits travel into its learning pattern.

From Canada to the Gulf

From the snows of the Laurentians to the Florida sands, groups of boys and girls from the Roslyn Public Schools in the metropolitan greater New York area have hiked, biked, paddled, skied, and camped in a program that combines adventurous travel, do-it-yourself housekeeping, and group living. No small part of the appeal is in the fact that these modern-day explorers do much of the travel under their own power.

School time, weekends, and holidays are strung together as necessary to permit the number of consecutive days, from three to seventeen, needed for these five to seven yearly trips. Groups are on the road upwards of thirty days a school year.

Trips have been in all directions, with the bicycle the favorite means of transportation. Youngsters have pedaled through New Jersey; various regions of New England; upstate New York, where they visited the capital; out to the tip of Long Island; over by ferry to Shelter Island; through sections of the beautiful Connecticut River Valley; down through Pennsylvania, Maryland, Virginia, Washington, D. C., and as far south as the Gulf coast of Florida. They have also hiked the Horseshoe Trail; canoed in the Adirondacks; skied in Canada, Vermont and New Hampshire; and camped in the jungle and on the beaches of Florida.

It was for a Florida trip that students spent winter weekends designing and building a trailer to transport twelve bicycles and their equipment. Then with camping spots on the Skyline Drive and in state parks, they motored to their base in Florida and explored from it by bike and foot. Because the boys and girls used back roads and trails, the natural beauty that is often hidden by tourist attractions was for the seeing. Here they shared the experience of preparing a jungle meal of wild pig barbecued over the coals of the live oak tree with cooked heart of Palmetto palm. Here too was a natural pool, fringed with palms, whose refreshing water was shared with three alligators. This was high adventure indeed for a group that felt at home in the forest and had dispelled fear with the knowledge that alligators would be content to watch from a distance. There were wild horses in camp; birds, fish, reptiles, and the lush vegetation; camping skills; a look at what is between home and a distant place. But most important, boys and girls had the opportunity to live closely with others and to develop a sense of concern for other people, as well as a feeling of responsibility for their own thoughts and actions. They learned to live with others, by living with others.

How It Began

How did this come about. It started with an interested teacher and a group of students who together wanted to see what was beyond the horizon. They wanted to go slowly enough to see, to feel free to stop and talk with the people they met, to visit places different from their home community, to re-live history at the sites where it was made, to learn, firsthand, what our nation is. At the same time, back in the late 1930's an organization was formed with the purpose of developing healthy, happy, self-reliant, well informed, community and world-minded citizens and providing for inexpensive educational travel opportunities through the development of hostels to be used for overnight stops.

Hostels Provide the Means

The American Youth Hostels, Inc. provides separate bunk rooms and washrooms for boys and girls, a kitchen, and usually a recreation room. Resident house-parents welcome a group as they arrive at the end of a day of "human powered" travel. They may shop nearby, make the evening meal, spend the night, prepare breakfast, clean-up, and be on their way. The facilities are simple, often a converted barn, shop, or part of the farm house. Blankets and cooking pots are furnished. The hostellers carry eating utensils and a sheet sleeping sack.

In this unhurried environment, away from the spectator world into which they were born, boys and girls find a new thrill in active participation. Youngsters today need travel under their own steam. They need to be dependent on their own resources. They need to learn something about the simple life, to get closer to nature and to God. They will be better men and women for it. As youngsters have said, "You learn something on every trip, facts and how to do things. You learn about cooperation, too, and getting along with others. On a trip you decide what to do; in class or at home, someone usually tells you."

Learning Carries Over

How about the academics? Could history be more real than to a group standing on the very spot from which Lincoln spoke his timeless words; or to cyclists looking out over the rolling hills of Valley Forge. Textbook lessons in social studies, English, mathematics, health take on real meaning when we consider meeting new people, planning meals, sharing responsibility, budgeting, building self reliance. The possibilities are endless for direct experiences at a time when they are most meaningful. As a principal has said, "I don't know whether hosteling attracts good students or whether it makes good students, but youngsters with this experience usually do better than average in the classroom."

The group size varies from ten to fifteen on each trip, with one or two teacher-advisers. Because of the big city congestion, most of our trips begin away from Long Island with transportation to the point of departure by train, bus, school bus-station wagon, or private car-bicycle trailer. Except for transportation by public carrier, expenses are no

greater than for a day at home. Food and overnights average under two dollars a day.

It was in response to a call for adventure and scientific investigation that led groups of students to make annual underwater diving expeditions to the Florida Keys. There they camp for several weeks on the beaches of uninhabited keys, plan and cook their own meals, trying at times to live off their catch from the sea, and enjoying the thrill of an outdoor group-living experience. The objectives of this trip are varied. They include diving explorations in tropical coral waters, undersea photography, the collection and preservation of marine specimens for our school's science laboratories. Some try their hand at the sport of spearfishing.

Necessity Is a Good Teacher

Much of the equipment necessary for such an expedition is the product of the home work bench. There ingenuity is matched against a student's limited finances. The result has been a remarkable variety of camera cases, diving units re-constructed from old refrigerator parts, "water buckets" with which to view underwater scenes, collection bags, and a variety of guns and spears. While most of the time is spent diving off the coral reefs, there is still an opportunity for sightseeing and visiting with other youth groups. Nor does the activity end with the return to Roslyn. Assembly programs and classroom presentations help to stimulate interest for other trips five-fathoms deep.

Camping as a Human Relations Course

As a result of our favorable experience with transient hosteling as a school activity, we have for seven years included a program that provides many of the values of educational travel with an extended group-living experience in one location. In this program, a class and teachers spend a school week providing for their daily needs and exploring their new environment. A site we use in the Pocono Mountains of Pennsylvania serves as a base for the study of the natural world in a setting of woods, fields, ponds, waterfalls, hills, rocks, and wildlife so scarce in our home community. Another group has lived in a coal mining town and has had the experience of making a community study that included geology, public education and welfare, unions, religions, mines and mining, and young people and their problems. Still another group has lived in a small New England village and participated in its life. Another group has lived in a Pennsylvania-Dutch community.

For many of these experiences, we have drawn upon and used the facilities of the American Youth Hostels which are available to all groups by paying a nominal membership fee. We look forward to having a site of our own in the future, where groups studying the Empire state may find inspiration through participation in outdoor work experiences and conservation effort and may have a feeling of sharing in an on-going educational adventure. This vast, vital educational opportunity is available for all who would but train their eyes to see it, move their legs to achieve it, and open their minds to accept it.

A School Farm Laboratory

Implications for work experience in this school farm are as significant as those for its laboratory use. It is the story of Tyler (Texas) Public Schools' farm laboratory. Covering 180 acres of land, it is probably the largest school laboratory anywhere. It is equipped like a farm, complete with barns, pastures, orchards, implements, silos, farm house, and poultry houses, because it is a farm laboratory maintained by Tyler Schools. It is operated by students who take vocational agriculture in Tyler High School.

Students use the farm in studying agriculture just as they use a biology laboratory in studying biology. When cover crop-planting time comes, two dozen young farmers may be in the field to do the job. If the orchard needs spraying, an entire class will probably take part in the job. If a tractor needs an overhaul, several Future Farmers fall to and do the job in the farm shop.

The seventy-five Future Farmers taking agriculture at the high school are by no means the only youngsters who use the 180-acre laboratory. On almost any school day, a score or more of elementary-school children may be found feeding hens and gathering eggs in the hen house. The next week another class may be getting their farm experience by feeding the pigs. The youngsters visit the farm in the laboratory phase of their outdoor life studies carried on in regular school work.

There is one big difference in this laboratory and, say, a chemistry laboratory. Chemistry laboratories don't pay their own way. The farm laboratory does, because it is operated, as nearly as possible, as a practical farm.

The school farm laboratory has been operating since 1950. Vocational agriculture teachers have nothing but praise for the farm as a laboratory for teaching the best and latest farming methods. The laboratory is a success.

How It Began

Tyler's farm laboratory started with a group of Smith County citizens who became concerned about the lack of outdoor education their children were receiving. Tyler, seat of a county very definitely agricultural, had school children who knew no more about the soil than youngsters growing up on the sidewalks of a huge industrial city. Some children past the first grade in school didn't even know how milk was obtained from a cow. Others didn't know that milk came from cows at all.

This situation resulted in the organization of a group of citizens called the Smith County Youth Foundation. The Foundation set out to see that Tyler youth groups had an opportunity to learn something about the great outdoors and the soil that supports them.

The city of Tyler and the Youth Foundation first cooperated in establishing a 100-acre camp site on the shores of Lake Tyler (twelve miles from town). This camp (named Camp Tyler) was turned over to

the school system to be used in regular school for nine months and by various youth groups during the summer vacation.

Just next to this camp property, the Foundation managed to get 180 acres, already partially in a farm, and leased the acreage to Tyler Schools at one dollar a year to be used as a farm laboratory.

Things took shape fast. The vocational agriculture department of the high school was handed the job of operating the farm. Projects began to shape up. Then a local citizen, Judge S. A. Lindsey, gave the ball a rolling push when he donated \$15,000 to go toward developing the 180 acres to approximate a typical one-family East Texas farm unit.

Now the vocational agriculture teachers and the Future Farmers could really go to work. The farm landscape acquired a modern Grade A dairy barn and concrete-floored lot, a broiler house, a laying hen house, a remodeled barn, implement sheds, hog lots and feeders, and cattle pens—all painted a neat white and looking like a model farm. Nearly all this work was done by vocational agriculture students.

Since the students can hardly live on the farm day and night, a regular farm manager is hired to look after not only the dairy but also all the enterprises. FFA boys, during regular class periods, work under the farm manager and take instruction from three agriculture instructors on the school staff. The boys do not attend to the milking chores regularly, since they are at home when milking hours come around.

They do, however, keep up with the production records of each cow through a herd book kept by the farm manager and the agriculture instructors. If an instructor wishes to make a point about why a dairy cow should be culled, he can get the book, figure the feed costs against the value of a cow's production, and *show* why she should be culled.

"And if, for instance, we're studying about San Jose scale on fruit trees," says Lawson Sowell, one of the teachers, "we don't have to show a picture or describe how it looks to the boys. We can just take them out in our orchard here to show how it looks, and then how to spray to control it."

The instructors also have the advantage of having good examples of both dairy and beef animals right in their own laboratory as teaching aids. The farm owns more than forty head of dairy animals—Jersey, Guernsey, Holstein, and Brown Swiss—and eight head of Angus beef cattle.

Here in the laboratory, a vocational agriculture student is encouraged to take part in the activity which interests him most. This activity may range from caring for broilers to planting and managing temporary grazing in the pastures.

If a boy has a definite dislike for, say, mechanics, he is not forced to work at repairing the tractor. There are always several lads around who are natural mechanics and would rather tear into the tractor than do anything else.

No matter how a youth spends his time, however, in the classroom, he hears about *all* the operations on the farm. The boys who repaired the tractor tell the entire group what they did and why. The students who cared for the broilers may have to explain why a run of birds failed to show a profit at market time. Others who tended the pigs or the dairy heifers must keep the class posted on progress being made. The idea is to see that a student gets an over-all picture of just what it takes to operate a farm of the type which might make a family a living in East Texas.

Outdoor Education

A regular program of outdoor education is included in the Tyler Public Schools now. Children in the first six grades spend five days at the camp adjacent to the farm, and make visits to the farm laboratory regularly. The director of the school camp says the farm has been the most popular feature of the outdoor education work, as far as the children are concerned. These youngsters in the early grades are not, of course, being taught technical agriculture as the Future Farmers are, but at least they are gaining some basic knowledge of the importance of the soil and the things it produces.

Uses for the farm have been many. High-school biology classes, for instance, visit the farm for field trips; and many groups not even connected with the school system are welcomed at the farm. The artificial dairy breeding association which operates in the county meets at the farm. The first-rate set of pastures developed on the place has furnished interesting material for pasture tours of farmers and ranchers of Smith County. Many groups and individuals representing the various farm agencies have used the farm laboratory for meetings or demonstrations.

No, the farm laboratory does not make a lot of money. However, it is self-sustaining, a characteristic any school official loves about a school facility. But the very fact that so many youngsters use the farm laboratory reduces its chances of showing big profits. When second-grade pupils gather eggs, for instance, they're bound to break some and are likely to frighten the hens and discourage production a bit. These things cut into profits. Any farmer knows that his income is not going to be increased by allowing every citizen in the country to roam over his farm; particularly, if the farmer encourages the visitor to take a sample of everything he sees. This, in effect, is what happens at the farm laboratory, because it is part of the laboratory's function.

When milk or eggs or broilers or any other product of the farm is sold, the money goes into the general school fund. At the same time, if supplies at the farm are needed, they are bought with money from the same fund. However, a separate financial record for the farm is kept so that school authorities know at any time how the laboratory is going, money-wise.

So far, it has been going nicely, and at this stage the laboratory is no longer in an experimental stage. It is an accepted part of the school system and is doing the job which the Smith County Youth Foundation, several years ago, dreamed that it would. And in a few years it should be impossible to find an elementary-school child in Tyler who believes—as one once did—that the dairyman gets milk by pressing on the sides of a cow.

School Forests

For many schools throughout the country a school forest constitutes a natural outdoor education center. In other instances, municipal, county, state, and national forests can be used similarly by schools. Most of the descriptions of outdoor educational activities would be appropriate in the use of forest lands that are available to schools.

The idea of school forests largely grew out of the period when the needs for reforestation were beginning to be evident. A consciousness about the fate of the cut-over lands where great forests had been, and the development of a concept of proper land use impelled agriculture and conservation leaders to educate the public about the need for conservation and wise use of natural resources. Farming had followed the great timber slash with little or no attention to the ability of the land to raise farm crops. Often a bare existence for those who moved out on the lands followed and, finally, a reversion of the properties to the state government due to tax delinquence resulted. It was during this period that the practice of deeding land to counties, townships, cities, villages, and schools developed. While the original purpose was to get the land replanted to trees and demonstrate the need for better reforestation and land use, it was hoped by many that the forests would help serve the educational and recreational needs of the communities, particularly the schools.

Legislation was enacted in several states, permitting the establishment of county, township, village, city, and school district forests. In most instances the properties were deeded by the state agency holding the lands, such as the department of conservation with provisions that reforestation and timber management practices be carried out.

In 1927 a law was enacted in Wisconsin and revised in 1949 which reads as follows: "Sec. 28.20. Any city, village, town, or school district may acquire land, engage in forestry, and appropriate funds for such purposes. In the case of a city or village or school forest, the forest property may be located outside the city or village limits."

As a result of such laws, many hundreds of parcels of land varying in size from a few acres to several hundred were deeded to Michigan schools. In districts where there were high schools, the agriculture department usually took the lead in carrying out the reforestation program. Trees were furnished by the state department of conservation,

and most of the land was soon planted to trees which were appropriate to the soil and location.

During the time of low-priced land and available tax-reverted tracts, many schools purchased land for forest purposes. Like the others, the major part of the earlier use was for tree planting, but, in many instances, far-sighted administrators and teachers saw in the school forest new opportunities for outdoor education, related to the school's instructional program.

Purposes of the School Forest

The school forest has two major purposes: (1) through reforestation and management of the plot, to develop an understanding of the growth and wise use of the forest; and (2) to provide an outdoor laboratory for learning activities that can take place best in a forest environment.

Forestation and Management

The first of these purposes is concerned primarily in getting proper land use of the specific piece of land and to develop public concepts and attitudes about good conservation practices. It also demonstrates the social and economic benefits accruing from proper land use, develops an appreciation of the importance of woodlands, and encourages those who own property to carry out good woodland management. If the school forest was made possible by a land grant, the school had specific responsibilities in carrying out the original purposes. Periodic reporting is necessary and there should be working relationships with local, state, and national units of government in achieving the greatest results and providing channels for interpretation to the public.

A sample form for reporting is suggested in a publication on *School Forests* by Michigan State University.²

The development of the school forest to satisfy the purposes of the land grant requires careful and somewhat technical management. Some of the activities included may be:

1. Mapping and establishing boundary lines
2. Making a master plan
3. Tree planting
 - a. Areas to plant
 - b. Choice of stock and obtaining trees
 - c. Ground preparation
 - d. How to plant
4. Care of plantations
5. Christmas tree production
6. Tree protection and disease and insect control
7. Thinning and pruning
8. Harvesting
 - a. Marking and scaling
 - b. Sale

² *School Forests—Their Educational Use*, Cooperative Extension Service, Michigan State University, East Lansing, Michigan.

All of these activities can be of great value to the adult participants and all those that may observe the process over the years. As one would expect, it is sometimes difficult for a community to keep a substantial interest in the program over a period of years unless there is constant use of the forest for school and community activities. More effort and planning is required for the less spectacular process of management.

General Educational Use of the Forest

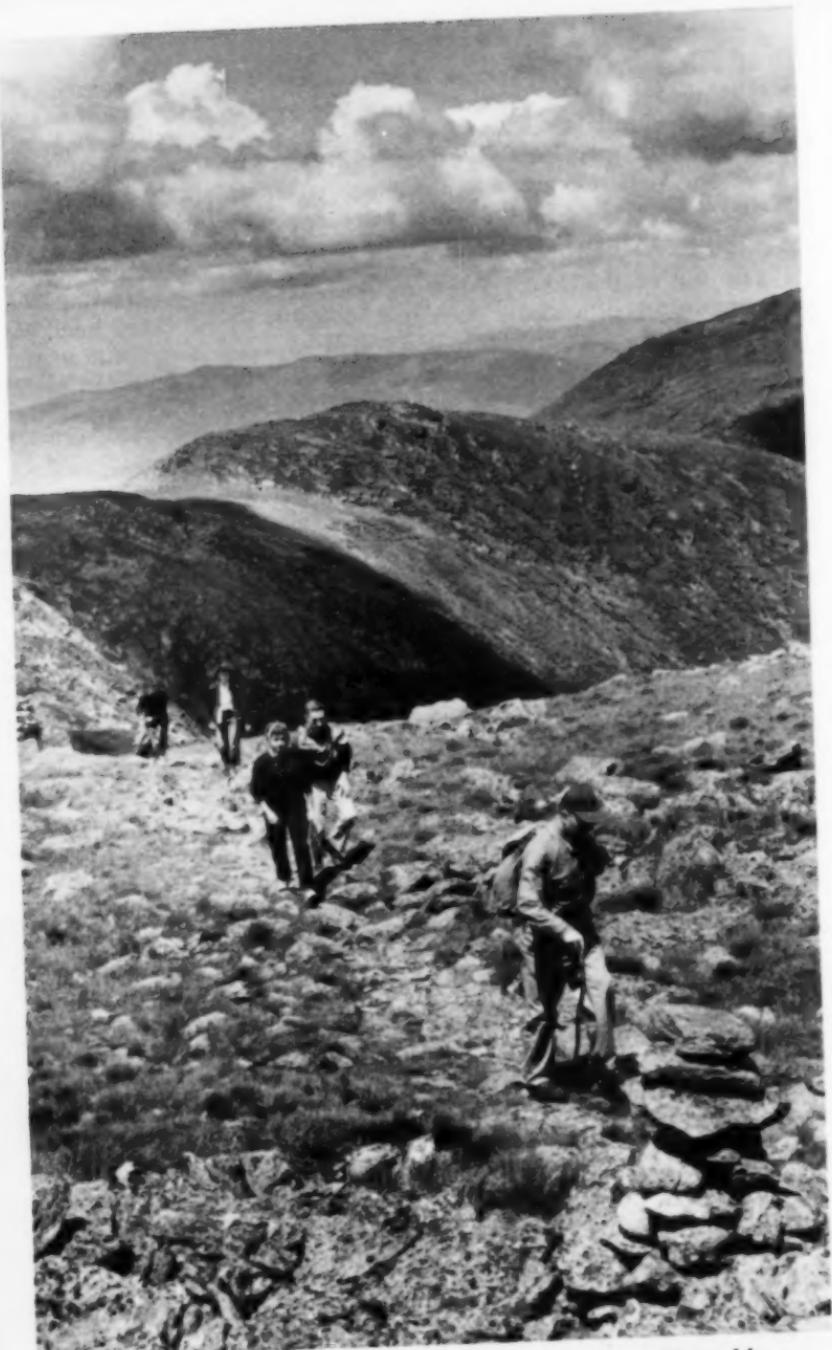
The use of the school forest in the educational program of the community school is almost unlimited. There is an increasing trend for school districts to purchase parcels of land often located near the central school buildings that can be developed into forests. In many communities there are pieces of marginal lands often barren and unsightly that could be purchased reasonably. In some cases, pieces of land are given to schools by private individuals or industries. Sometimes these areas are wooded and well developed, and, in other instances, the site may be an abandoned farm or deserted real estate subdivision. In either situation, there is a great opportunity for a unique educational program which will pay big dividends in community education and often with some financial profit.

Witness, for example, some of the beautiful pines now growing on what were denuded and eroded hillsides that were planted in the late thirties or early forties by the CCC. In some sections of the country roadside signs will be seen pointing to a school forest or a public recreation area which was once a barren and unused piece of land.

One of the greatest values of a school forest might accrue in the selection, purchase, planning, and development of the site. The permanent values to youth in having had a part in the development of land may well be the school's greatest contribution to citizenship and social responsibility. Many state and local subdivisions now have maps and aerial photographs and descriptive material of lands. Whether a school obtains its forest from public authorities or purchases it from private owners, the project should be a whole school affair as much as possible. In contemplating such an event, school-community planning committees should be formed. Many resources are available for help, such as the county agricultural agent; the soil conservation service; national, regional, and state forest offices; conservation and parks departments; colleges; and others. Much literature is available such as the school forestry publications, conservation department materials, and others.

School Forest Programs

Many outdoor education activities in other kinds of situations such as parks, camps, and farms are available in the school forest. Forests usually are the habitat of more wild animals and birds than would normally be found in a small and more domesticated area near the



An outing club high in the White Mountains of New Hampshire.

school. Obviously, there are also more opportunities to study trees and observe the interrelationships that exist among plants, animals, soil, and water.

Some of the more common uses of the forest for instructional purposes include:

1. A laboratory for elementary classroom activities, such as science, social studies, music, art, and conservation.
2. Learning opportunities for school groups with special interests, such as forestry, agriculture, conservation, botany and zoology, history, shop, and raising Christmas trees.
3. Opportunities for development of skills and hobbies, such as use of native materials, simple shelter construction, fire protection, archery, and camp crafts.
4. An outpost facility where camp shelters may be constructed for day or resident camping.
5. A recreation resource for the community for picnics, hikes, and other outdoor activities appropriate to the environment and to the property.

Outing Clubs

School clubs offer many opportunities for outdoor activities, particularly in secondary schools. An increasing number of schools now regard the club program as a part of the curriculum offerings and provide adequate leadership and time to make them worth while. With such activities organized each year on an interest basis, the club program can become vital in enriching the school's entire instructional program. A great variety of outdoor clubs will be formed in schools. Some of the types reported include: outing, conservation, fishing, hunting, skiing, bait casting, riflery, fly tying, fly casting, taxidermy, hiking, birds, canoeing, outdoor science, forestry.

Outdoor clubs are usually organized so that some time can be spent during the regular period provided in the school for discussion, study, business of, and planning for field experiences. Often the most interesting and valuable parts of the club are the trips, camp outs, and other informal activities that are planned by the participants. Some examples of different kinds of clubs, illustrating how they can become an important part of the curriculum, are described below.

Mountaineering and Camping Clubs

Having taught for many years in high school, I know how crowded the program has become. Climbing, camping, and skiing are handled in many high schools through extracurricular organizations.

Here at West High School in Bremerton (Washington), they are a part of the intramural program. All the students interested in outdoor activities are invited to join the Outdoor Club. Banded together, they plan a number of activities for the year. Objectives and the organization of the club are reconsidered each year by the students themselves before the program is laid out. In the fall, the club enjoys fishing, hiking, and camping. In the winter, they ski. Again in the spring, they hike and climb. Before their trips, each group meets to go over the important

factors to be kept in mind—what to observe on the trip, and safety measures. Before ski season, there is a short ski school under the direction of a leading skier of this area who presents three evening lectures. Advanced skiers are present on ski slopes to help beginners learn properly. This popular club is filling a real need for students of outdoor activities in our high school.

Cooperative Curriculum Planning

Living, as we do, on the Olympic Peninsula, in the very shadows of the Olympic mountains, it is natural for young people and adults of this area to turn to the mountains for recreation. Our location is the chief reason that Olympic College and the cooperating high school have developed outdoor classes as part of their regular curricula. From our experience, we can say that teaching outdoor education through family camping, summer hiking and camping classes, climbing, and skiing is a worthy addition to the program of schools interested in teenagers.

The thought of climbing, camping, and skiing, as classes, is new and was developed here only after careful planning by a committee composed of high-school instructors and interested citizens who met with the administrators of Olympic College (a junior college, also in the town of Bremerton, Washington). It was decided to offer a class in climbing. The committee felt that it would be better to offer the class as a part of the evening-school program so it could be available to the entire community.

Mountaineering

Basic training in mountaineering is just as essential as training in major sports. Any program that requires personal skill and a degree of calculated risk demands a training program before students should be encouraged to undertake it.

The Seattle Mountaineers were well known for the classes that they conducted for their members. They accepted our request for help, and soon a curriculum was planned and a class scheduled. We then sent special invitations to all high-school students in our county to join the class if they liked to climb. There was immediate response, and classes have been held every spring for the past seven years. Scarcely a student in this area who likes to climb fails to enroll.

Lectures are given in the evening, and the field trips and climbs are on weekends. The following is a sample schedule:

LECTURES

- Mar. 22—Registration and orientation; exhibition of equipment
- Mar. 29—Basic rock climbing and rope fundamentals
- Apr. 5—Safety

FIELD TRIPS

- Mar. 24 or 25—Green Mountain (orientation)
- Apr. 7 or 8—Monitor Rock (rock climbing practice)
- Apr. 21 or 22—Little Si (rock practice)
- Apr. 28-29—Cayuse Pass (snow practice)

LECTURES

Apr. 12—First aid
Apr. 19—Trail techniques and camp cooking
Apr. 26—Basic snow climbing
May 3—Final examination

CLIMBS

May 12 or 13—Mt. Ellinor
May 19 or 20—Mt. Baldy
May 26-27—The Brothers
June 2 or 3—Mt. Washington
June 10—Glacier practice on Mt. Rainier

Climbing is taught and conducted as a regular class and requires completion of work. Members must pass a written test on lectures, take three out of four field trips, and achieve two climbs at least. The interest in this program and the need it fills is shown by the fact that most of the students do much more than the required work.

While our location is only two hours drive from a mountain range, we start our practice in the high-school gymnasium. Access to an irregular wall or bulkhead can serve to teach techniques in finger and toe holds and rock climbing. Many of our students practice extra time at a rock quarry nearby. It is convenient for us to use the facilities of the Olympic Community College for our classes, but any high school could successfully organize this type of program.

For the young mountaineer, climbing fills his waking hours from morning until night. Though he may not realize it, he is attracted to study and read everything on the subject of mountains; he clamors for information. Soon he can readily name the great climbers of history and the heights of the highest peaks; and he learns about the terrific hardships climbers overcome to reach the top of each peak. The program opens a new avenue for comradeship. Climbing does not attract the lazy.

Meeting Living Needs

The question is often asked, "Why do those kids want to climb? What is this attraction to the mountains?" There is a call, an appeal to climbing for young people that many adults find hard to understand. The fact is that boys and girls enjoy and seek a chance to test themselves; they want to pit their strength against odds; they have to show their friends that they are grown up.

A generation ago a great percentage of the "teens" were needed on the farm and in family work. They had responsibilities. What is there in the modern home to challenge the physically growing boy or girl? Rapid physical development gives our youth a surplus of energy. Apart from the physical challenge, climbing is a mental and spiritual challenge. Also, the mountain is something real. The climber wants to climb a mountain because "it is there." Climbers see their mountain, move toward it as an objective. The biting wind whips them in the face. They must push on though they are weary; they develop self-control. The climber must refrain from looking down the deep crevasse or vertical wall. He must conquer the fear of "height that grips." When he reaches the summit, he can sit on top and look around at the lower peaks. He sees progress and

he thrills at conquest; he realizes satisfaction because he has accomplished an objective.

The difficulty is really not the point. He endures heat or extreme cold, the obstruction of snow, dizzy heights, obscure routes, jagged rock, fatigue —nothing stops him but the top of the peak; he has made the top! Climbers realize risks, but they overcome them. On the way down, they can look back on the peak where they sat a short time before. They can point out that peak to their friends. "We were on that top rock at two o'clock last Saturday afternoon," they brag; and the thrill is lasting.

Nor are the rewards all stern and severe. In the summer, there is the warm sun, the mountain meadows filled with flowers, the rushing streams, the murmur of waterfalls, the welcome rest in the shade, the refreshing drink of water, the delicious fragrance of the clean, fresh air, and the sight of bear, deer, and marmots. Near the peaks, the climber enjoys the brilliant blue color in the glacial ice and the sparkling snow. Always there is the joy of comradeship and the appeals that make lasting impressions on the young climber.

Considering this enthusiasm and determination, these students must have training to be safe in the mountains. Training, given in classes as we give it, is a part of the physical education schedule. It can be part of the intramural program or a project of organized clubs. One fact is clear: some type of training is necessary.

Camping

The summer period is an excellent time for training in camping. For a number of years, we have offered successful camping classes using the same school advisers that met with the climbing classes. Membership in our summer camping and pack-trip classes is open to a wide scope of ages. Since many of our members are teenagers, we again work with the high schools.

One class in campcraft completes a fifty-mile trek through the most primitive and scenic part of the Olympic National Park. Another class stays at a base camp in the Olympic Mountains for two weeks of instruction in art and campcraft, with a minimum of hiking to suit those unable to endure rigorous climbing. Both classes are offered during a July-August period and are part of the regular summer-school schedule.

Each day the classes enjoy some type of camping instruction from accredited teachers in a variety of subjects including Alpine flowers, plants, and animals of the National Park, weather, climate, geology, astronomy, photography, first aid, camp cooking, basic campcraft, safety, hiking, climbing, and the art of group living.

While the trips are carefully planned ahead of time in every respect, ample opportunity is given to participating members to plan fun at the campfires, to choose side trips, and to enjoy their experiences of living together. Everyone in the mixed group shares in the camp work through rotating committees as aids in better acquaintance.

3. ENRICH LIVING THROUGH OUTDOOR EXPERIENCES

THREE factors in modern life have tremendously influenced the participation in outdoor activities. These are increased leisure, increased income, and increased mobility. With more time and more money at their disposal and with better roads and more automobiles than ever before, Americans are able to get out of doors in unprecedented numbers.

The extent of the participation of the American public in outdoor activities each year is indicated by statistics which show that there are 54 million visitors to the national parks each year, 40 million users of the national forests, 183 million who visit state parks, 21 million fishermen, and 11 million hunters. More than 12 billion dollars are spent annually in the travel and vacation business.

The movement of city dwellers to the suburbs has created a new group in American society, a group whose work is tied to the city, but whose living is semi-rural and whose leisure interests lie largely in the out-of-doors. Outdoor-related hobbies have risen to new heights of popularity. Bird-watchers, "rockhounds" who collect and polish rocks, amateur archeologists, botanists, and astronomers are legion in number. The forests and parks are filled with campers, hikers, and boating enthusiasts—all seeking satisfaction in the out-of-doors.

This great exodus has not come without creating problems. Sometimes the pressure of numbers takes from the outdoor areas the very thing that the visitors seek. Highways are crowded, parks and forests are inadequate, camp grounds are congested, fishing streams are seriously overused. Manifold problems arise with overuse and misuse: litter on highways and in parks and forests, the defacement of natural features, the destruction of plants, the flouting of game laws, the indiscriminate killing of non-game animals, the erosion of soil tramped upon by too many feet, the destruction of signs and labels, fires resulting from carelessness, and damage to facilities and equipment because of vandalism. Outdoor accidents—most of them preventable—are far too prevalent.

What is the school's responsibility in outdoor usage? If our outdoor resources are to serve future generations, the school can make a major contribution in teaching young people to regard their outdoor heritage with respect, to cherish and protect resources in danger of serious depletion, and to restore and repair damage wherever possible. The school can give instruction in accident prevention out-of-doors and in outdoor good manners—lessons which in many cases can be taught only in the outdoor setting itself.

A second major contribution that the school can make in outdoor usage is concerned with the development of skills and interests for the worthy use of leisure time. The American people today turn in ever-increasing numbers to outdoor pursuits for satisfactions that are deep and enduring. Those who attain such satisfaction will inevitably be con-

cerned with the conservation of our natural resources for generations to come.

The following descriptions present a few of the many outdoor experiences that are logically a part of the secondary-school curriculum and have tremendous life enrichment value.

Campcraft and Outdoor Living

From deep within us all there are urges that can be satisfied only through an experience in the out-of-doors. People generally need an exposure to the elements—through elemental experiences. They need to have contact with forest and field, snow and smoke, wind and water. Their lives will be richer for having had an opportunity to acquire new physical skills and mental attitudes and to live in the out-of-doors, in the woods, on a lake, up a mountain. Three elemental experiences come quickly to mind—with shelter, with fire, and with food.

Shelter

In regard to shelter, most people can remember the fun that they got out of throwing a blanket over a line in the backyard and calling it a tent, or of finding a packing case to play in, or the very real pleasure of crawling inside a cardboard box and sitting out in the rain looking out and feeling comfortable and protected. This must be closely related to the sense of security that our ancestors got as they crawled into their caves and looked out at the elements pouring down about them.

There is a fascination with fire—man, for example, doesn't just burn leaves in the fall to get rid of the leaves, but because there is a fascination about the fire. Children will build fires in vacant lots and play about them, sit and talk. The fascination of a fireplace is carried over even today into our most modern architectural forms where we don't really need the fire for warmth, but use it as a symbol of our heritage.

Food Preparation

Food preparation presents a particular kind of fascination for all people, not only because of the creative expressions that are possible, but also because it is such a satisfying occupation! The proverbial hot dog on a skewer isn't a difficult culinary task, but the inward feeling of accomplishment might be akin to that of primitive man with his raw meat on a stick.

Through quite a variety of youth-serving agencies, boys and girls are getting an opportunity to participate in programs of campcraft and outdoor living. But it isn't enough to acquire some of these skills at an early age and then never use and develop them further. These competencies need to be practiced and constantly improved for successful living in the out-of-doors.

Campcraft Skills

Skills that form a backlog for campcraft can include the following: toolcraft, knotcraft, firecraft, cooking, map and compass, equipment and gear, safety and sanitation, conservation.

With tools, a person should be familiar with the utilization of woods tools. He should be able to handle a knife, axe, and saw with sufficient knowledge to do the cutting that is necessary without harm to himself and others. He should know the proper care of these tools—how to sharpen, store, and repair them. More stress is being placed in camps today on the utilization of saws rather than axes for many cutting purposes—it is a much safer tool and one that can accomplish the necessary work in short order.

In knotcraft, a person should be able to know and properly use three or four of the common knots (square, clove hitch, bowline, timber hitch), and he should also be able to do some lashing for general campcraft construction work. With firecraft, a person should be able to make a careful selection and preparation of the fire site and the proper selection of materials for tinder, kindling, and fuel. He should also be able to construct three different types of fires and demonstrate the proper extinguishing of fires.

Skills a camper should have in the cooking area would include such things as being able to plan, prepare, and pack a couple of different style meals. He should be able to set up a camp kitchen and demonstrate proper sanitation and cleanup techniques. Simple one-pot meals are good for beginnings and the outdoor chef can move on to more complicated cooking and reflector baking as he gains in experience.

Knowing where to go and how to come back depend on a person's ability to use map and compass. In addition to these aids, a person should be able to find his direction by sun and stars and should be able to orient himself in the out-of-doors. The utilization of the Silva compass is covered in the section headed "Orienteering" found near the end of this chapter.

In regard to equipment and gear, campcrafters need to gain skills in selecting, packing, and carrying personal clothing and program and safety items for personal and group use. This should include such things as packs, shelter (tents, tarps, etc.) tools, sleeping bags, sports equipment, first aid kits, etc.

Safety and sanitation procedures are necessary throughout any kind of campcraft and outdoor living program. Provision should be made for utilizing proper procedures with tools, knots, fires, cooking, etc. In addition, persons engaged in campcraft should know and realize their limits as far as adequate rest, balanced food, and protection from hazards is concerned. This necessitates competent leadership and careful planning throughout.

Wise Use of Natural Resources

All campcraft and outdoor living activities should be permeated with consideration of the wise and careful use of the natural resources that surround us. Finding the natural resources that are available and using them wisely is a part of conservation education. Campcrafters should be vitally concerned with the replacement and improvement of areas utilized

and should be concerned with the necessity for careful cleanup and the following of good manners in the out-of-doors. These skills are not meant to be mutually exclusive—they are a vital part of any good experience in campcraft and outdoor, and they should serve as a guide to persons setting up the program of work for people to be thus involved.

If we can assist people to find the satisfactions that come through the acquisition of skills and the development of a friendly familiarity with the out-of-doors, we will be doing much towards contributing to their welfare. Giving them an opportunity through participation in activities of this sort on an individual, family, and group basis and placing this kind of experience in God's green out-of-doors are significant events in the lives of people. Giving them an opportunity to wonder and to wander and find their place in the physical universe is a challenge too great to be skimmed over lightly.

When a program of this sort is introduced into a school setting at the high-school level, it would be in order to recognize the fact that some of the persons to be involved may have had an exposure to it with youth groups. Less than fifteen per cent of our total child population receive an organized camp experience, however. The teenager, especially, needs the opportunity to engage in campcraft and outdoor living experiences. The program will need to be geared to an intensive level, however, to hold him. Intensity does not necessarily mean more complicated or involved—the writer feels that it may also mean the development and encouragement of simplicity, of "getting back to fundamentals." The teenager ought to feel the challenge of work, of taking his full share, of following through on responsibilities, of seeing the relationship of his endeavors to those of others. In a camping program, they can sense the "oneness," the consciousness of the group, and they can recognize the importance of working cooperatively in a relaxed, uncomplicated setting away from the gadgets of ordinary life. They need mature, trained leadership who can assist them in decision-making, in developing and strengthening their inner resources, and in guiding their way to fuller independence.

Through the organization of such groups as camping clubs, outing clubs, ski clubs, etc., it would be possible to carry on a vital program of campcraft and outdoor living. Regular meetings of the group with skill sessions, opportunities for members to teach others, sharing experiences, making equipment, planning-organizing-carrying out and evaluating a variety of outdoor experiences are invaluable learnings.

The following was written as a description of a collegiate outing club which the writer once directed. It has much in common with the program that can be developed on the high-school level. It is entitled, "This Is Us".

We . . . are commonly known as a pretty odd group of people . . . who climb mountains because we like the view from the top . . . who go out hiking because . . . well . . . because we like the sun on our backs or the

rain on our ponchos. . . . When night comes we square dance or sit around the campfire singing the old songs that campfire squatters have sung always . . . loving the sight of fire-light on the faces of our friends. . . . We don't happen to drink on our trips because liquor seems to be an unnecessary commodity . . . and besides . . . who wouldn't be "half-seas over" at the mere sight of a friend hanging from a rafter . . . safely zipped in a sleeping bag. . . . We boast the weirdest hats in the nation . . . faster fire builders than the Boy Scouts . . . though perhaps not with a single match . . . and undoubtedly the most perverted sense of humor since Joe Miller let loose his humor on the unsuspecting multitudes. . . . We don't tend to couple on our trips because . . . we like the give and take (as in food) of a group . . . and we like to carry the idea of . . . individuality within a group . . . into all phases of our program . . . and even into our personal philosophy . . . many people think we're crazy . . . we are sure of it. . . . We haven't written this to edify ourselves . . . we know it at heart. . . . This is for you who might want to know us better . . . like this page . . . we lack much formal organization . . . but still . . . this is us.

—SANDY ROSEBROOK
Syracuse University Outing Club

A State Program for Shooting Education

A primary objective of outdoor education is providing skills for lifetime enjoyment. Shooting can be classified as one of the activities that old and young, male or female, and even the physically handicapped can enjoy. While the immediate goal of the program reported here was positive skill training and the acquiring of firearms knowledge as a means of accident prevention, promotion of an activity in the public schools that would open new avenues in outdoor education was envisioned as an important outcome.

Before this program of firearms safety and training for shooters had been underway in New Hampshire for two years, eighty-two per cent of the state's high schools had introduced aspects of it in their curricula. Community readiness probably contributed most to local program initiation. In addition, a permissive statute was enacted by the state legislature. This law authorized any school district, which so wished, to teach safe handling of firearms, and to appropriate money for this purpose.

Building upon previous skeleton programs prepared by the National Rifle Association and materials furnished by Sporting Arms and Ammunition Manufacturers' Institute (SAAMI), three departments within the state government worked cooperatively to provide material for a course of study and to give assistance in the implementation of the program—education, fish and game, and the state police. The last two departments were interested because it was their personnel who were usually associated with the tragedy of a firearms accident. They realized that an eventual drop in gun-accident casualty statistics would be fundamentally a matter of education.



Conservation officers cooperate with the school in teaching the safe use of firearms.

It was made clear from the outset that each school should provide instructors from its own staff. The program administration and instruction should be teacher-centered. Fortunately, concrete evidence was available to prove the fact that skill training would be effective in reducing accidents—from the five-year record achieved by the National Rifle Association's young trainees in New York state, and from results attained through driver education programs in New Hampshire schools, which had reduced automobile casualties among trained students by at least fifty per cent.

Before the school program was available, it was necessary to establish basic concepts, provide a course of study containing material which was not a matter of the printed word, train teachers for the program, and provide access to competent consultants. School personnel must realize that the need applies to entire school populations, not just potential hunters. Statistics for New Hampshire, as well as for the entire nation, indicate that the majority of gunfire accidents occur outside the hunting field, and that juveniles are involved in more than their share.

A planning committee of specialists from education, conservation, state police, SAAMI, the National Rifle Association, and rod and gun clubs was assembled. Worth-while programs depend upon some standardization of instruction—especially in the area of safety education. The logical approach for such information seemed to be from men who had firsthand knowledge of New Hampshire's actual problems in the field.

A clinic was organized and administered to the entire force of conservation officers in the state fish and game department and members of the state police. Competent lecturers and discussion leaders spearheaded this first effort. The officers served as an exploratory group, contributed their practical knowledge, and, at the same time, were trained to act as consultants to the schools in their districts. The Governor of New Hampshire, the fish and game director, the superintendent of the state police, the commissioner of education, and the executive director of the National Rifle Association, all participated in the clinic. In this first effort, the elements of a practical program of firearms safety education were established. The entire clinic was tape recorded, and the proceedings were made available for future use in constructing a course of study. A second clinic was sponsored for teachers of the program and faculty members from interested schools. Eighty-four per cent of New Hampshire's school unions participated, along with superintendents and principals.

Instructor's Guide

As a result of these two clinics, a group of high-school instructors, reinforced with competent consultants, had been trained for a state-wide program of firearms education. The joint insight and experience of educators, law enforcement personnel, representatives from the arms and ammunition industry, and the National Rifle Association were now on record. The tape recording of the clinics and available literature were transformed into an *Instructors' Guide*. The subject matter was organized

into logical teaching units. The *Guide* contains practical information concerning organization and administration of the program, program materials, audio-visual aids, method of teaching, testing procedures, pre-testing; general knowledge of guns, rifles, shotguns, and pistols and pre-testing; general knowledge of guns, rifles, shotguns, and pistols, and ammunition; proper and safe handling of guns; instruction and demonstration range procedure and class firing; hunter's responsibility and parents' responsibility, lost hunter and non-hunter; accidents; field trips; and evaluation. Many teachers have utilized the entire program in their specific areas of instruction or taught certain units through course integration.³

As a result of administrator and teacher evaluation, the program received high approval, not only by school personnel, but also by parents and the participating students. Instructional level was judged most effective for grades eight, nine, and ten.

Films

In addition to the *Instructors' Guide*, the fish and game department produced two excellent sound-color films which may be obtained on a rental basis. The first, *Death Is a Careless Hunter*, is dramatic shock treatment. It re-enacts a deer-hunting fatality which actually took place in the New Hampshire woods a few years ago and the subsequent law enforcement routine and emotional impact on the man who did the shooting.

The second film, *Tomorrow We Hunt*, is the story of a teenage boy who, wanting to handle his gun and to hunt, used the New Hampshire Plan to persuade his dad and the school authorities to make firearms training available. This film is an attempt to describe the evolution of one state's program.

It should be emphasized that the success of the program was realized through the splendid co-operation of the state department of education, fish and game, and state police; local rifle and sporting clubs; local school personnel; Winchester Repeating Arms; Remington Arms; Sporting Arms and Ammunition Manufacturers' Institute; and the National Rifle Association.

A School Program for Hunting

With shorter working hours and longer weekends, people are turning to the out-of-doors in ever increasing numbers which means that there are more hunters roaming the woodlands—hunters who can be a hazard if ignorant and careless, or who may be trained in the skills of hunting and gun safety and taught the aesthetic values that mother nature has to offer.

It has been pointed out by the National Rifle Association that 2,500 people are killed each year by gunshot. Strangely enough 1,000 such accidents occur in the home, and of these 90 are children under four years

³ This guide is the prototype of the *Guide* issued by the American Association for Health, Physical Education, and Recreation.

of age. This would appear to point to a lack of training of adult and young alike in the use of firearms.

About the richest heritage a man could leave to this world would be an educated family—educated not only in the sense of achieving a high standard of living, but also in the sense of enriched recreation. As teachers we have been taught that one of the cardinal principles of education is *the worthy use of leisure time*. If we sincerely believe this, it should justify including hunting as a sport on the same level as baseball, football, basketball, or any other activity that is given a portion of time in any high-school curriculum.

Objectives of such a hunting-shooting clinic or program in secondary education might include the following:

1. To develop reliability and independence
2. To develop self-discipline and sportsmanship
3. To teach proper and safe method of handling firearms
4. To develop an appreciation of the out-of-doors
5. To develop an understanding of the state game laws and the reasons for enforcement

Fitting Hunting Into the Program

These objectives may be carried out in various ways. Some schools may integrate their materials in special classes such as biology, science, or conservation. An ideal situation would be an integrated program on hunter-safety training, involving all subjects; *i.e.*, history, art, English, homemaking, and the rest. However, school staff cooperation is necessary to make the program successful.

An Extracurricular Activity

Most schools today set aside a portion of the day for extracurricular activities. It is during this time that a worth-while program on hunting and shooting could be put into effect whereby everyone can be reached. To be really effective the program should be made available for all first-year hunters and to other interested students.

In order to obtain full cooperation, the parents and the community should be made aware of the program offered by the school by means of a letter to parents and by newspaper publicity, outlining the objectives of the course and indicating what is to be taught and by whom. If there is to be excused time from school for hunting, the parents should be told what standards must be attained by the student before he would be given released time.

Some of the basic areas included in the hunting-shooting education program at Graveraet High School in Marquette, Michigan, are:

1. *State Game Laws.* A lecture-discussion by qualified instructors on the current hunting laws in effect, with special emphasis on the interpretation to young hunters 18 years old and less. Materials are available from many sources, some of which are listed in the bibliography.



Fishing is enjoyed by young and old.

2. *Small Game Management.* A lecture-question or discussion session that deals briefly with rabbit, grouse, squirrel, and migratory fowl. This includes their habitat, customs, food desired, and their general availability in the vicinity.

3. *Management of Deer and Bear.* This session covers the habitat, food, cover, and customs of the large game animals. It discusses summer and winter habitat, the dangers involved in hunting these species, and the regions which they are likely to frequent.

4. *Gun Safety and Proper Clothing.* This session should be considered as one of the most important meetings of the class. It should be presented by qualified instructors with help from the class and should include all types of guns, their care and condition, as well as proper handling. Different members of the group could demonstrate the proper clothes to wear.

5. *Compass Reading and Map Orientation.* This session includes the proper reading of a compass and elementary map reading. Maps of the students' own locality should be distributed, and tips on how to use the maps would be in order. Part of the session could be devoted to "What to do and not to do when you are lost."

6. *Fire Prevention.* This session can be devoted to fires of all types—how they start, how they act, and the damage that can result. Emphasis should be placed on the careless camper and the careless smoker. Materials are available from many sources.

7. *First Aid.* This session can be an excellent one if presented by a local doctor who is an ardent hunter. Elementary first aid, such as the treating of shock, tourniquets, artificial respiration, and emergency carries, should be discussed and demonstrated.

8. *Law Enforcement.* This field could be covered by enforcement agency personnel. Laws and cases that have any bearing on hunting could be discussed at length. Procedure in locating lost hunters and other related fields should be described.

9. *Gun Care.* This session should be presented by the local resource leaders and should point out the different types of guns and ammunition. The importance of proper cleaning and storage should be stressed.

10. *How To Dress and Care for Your Game.* This session can be presented by a local butcher who would do an excellent job on this subject. Charts and other illustrations can be used to supplement the discussion. Recipes that deal with wild game could be discussed and materials, containing such recipes, could be distributed.

It would be well, if excused time is given for hunting, that students present evidence of adequate training in firearms safety. Each student meeting the standards should then present his hunting license and a statement of approval written by his parents to the proper school authorities prior to the released hunting time. (The length of time will vary according to the locality and type of hunting.)

The above type of program should give the student a new insight to our outdoor world. It will make him not only a more efficient hunter but also a better sportsman in a world where good sportsmanship is lacking many times. With this better understanding will come a new curiosity about God's great out-of-doors and a deeper appreciation for the wildlife and beauties of nature in all seasons of the year.

Casting and Fishing

Each year more people go fishing than participate in any other outdoor, sport. The U. S. Fish and Wildlife Service quotes a figure of over twenty million, determined by actual survey. Fishing is enjoyed by young and old, rich and poor, in every section of the country. It has the same appeal

whether done on a small stream, big river, shallow pond, or deep lake. It has the same value as a leisure-time pursuit for the small boy fishing daily on his father's farm pond or nearby creek as it does for the adult spending a two-week vacation, fishing a wilderness lake in a national forest.

The types and methods of fishing vary according to the personal desires, equipment, and ability of the fisherman. The most elementary form is fishing from a bank or a boat with a line tied to the end of a cane pole. This is commonly referred to as still fishing, the bait usually being live minnows or worms. When the rod and reel is used instead of the cane pole, the fisherman's ability to control the line and bait is greatly increased even though no more or no larger fish may be taken. The rod and reel, rather than the cane pole, has developed into standard fishing tackle for taking game and pan fish in fresh or salt water, whether by still fishing with natural bait or by casting and retrieving artificial lures and flies.

Kinds of Fishing

Fishing tackle and methods may be grouped into four classes: bait, fly, spin, and surf casting.

Bait casting is done with a relatively short, springy rod and revolving spool reel. The weight of the lure causes the line to play off the spool reel which revolves during the cast.

Spin casting is bait casting with a fixed or stationary spool reel, especially adapted for extremely light lures.

Fly casting is done with a stiff, thin rod, seven to ten feet long, and a heavy line that pulls the leader and fly through the air during the cast. The reel is merely a line holder and is not operated except between casts when the line is stripped or rewound.

Surf casting is for ocean-shore fishing, using an extra long, heavy, stiff rod that is cast with both hands. Reels capable of holding lines up to 200 or 300 feet are used and they may be either the revolving or fixed spool type.

Many of the twenty million boys, girls, and adults who fish every year have only moderate success. This is largely because of improper equipment and undeveloped angling techniques. The most important single contributing factor to successful fishing is successful casting. Successful casting means delivering the bait to the area in which the fish may be caught with ease and accuracy and without entangling the line, snapping off hooks, or endangering the safety of the caster or his companions. Less casting is required when still fishing than when using artificial bait. Even so, still fishing requires a certain degree of skill in casting to deliver the bait and line to the water. Fishing with artificial lures is ninety per cent casting and requires proper equipment and technique.

When the essential skills of angling are taught to school-age people, fishing becomes a more satisfactory leisure-time activity. Pupils who have

been taught to cast and fish are more likely to enjoy the outdoors because of successful fishing experiences. When given an opportunity to learn the techniques of the sport while in school, more pupils go fishing more often and with greater success. Moreover, learning to cast is fun.

How To Start

Of the two practical ways of conducting casting programs, one—the casting club—is highly desirable in many school situations. Its purpose is to bring together a group of pupils who have a common interest in the outdoors (especially fishing) and to give them an opportunity to learn angling techniques, primarily casting. The casting club is organized and run the same as other school clubs. Meetings may be held before or after school or during an activity period. The club is where the members learn casting skills and fishing techniques, and where they plan other related activities such as field trips to nearby fishing waters. Equipment may be furnished by the individual or by the club.

The second way of sponsoring a casting program is as a curricular activity in a physical education class. This is desirable whether or not there is a casting club in the school. If there is a casting club, its activities fit in nicely. Skills and techniques may be taught in the class, and competition and field trips may become the major activity of the club. Casting may be offered as a full-time physical education activity for a term or semester, or it may be given for a part of a term as one of the several skills taught for use in outdoor activities, such as camping, archery, gun handling, and water safety. Also it is highly desirable for physically handicapped pupils whose outdoor activities are limited.

Equipment

The equipment needed is rods, reels, lines, practice plugs and flies, and casting targets. Targets are either tubular metal rings, thirty inches in diameter, for water, or wooden or metal disks of the same size for lawns and gym floors. The equipment requires little storage space and does not take long to set up or put away. It may be procured in the same way as other physical education and athletic equipment.

Considerable care must be given to the selection of rods and reels so they will function properly when put to their intended use. Tackle sold for fishing is the same as that used for practice casting and for casting competition. Almost all rods are of glass construction. They are durable, need the minimum of maintenance, and are inexpensive. There are so many sizes, shapes, and kinds of reels that a novice fisherman is often confused when making a selection. Reels should be light but durable, made to withstand wear, and simple to operate.

It is extremely important that reels be used for the kind of fishing for which they were intended. For example, many reels are made for still fishing rather than for casting artificial lures. They look like casting reels; but, because of the construction of the frame, spool, and gears, they are not suitable for casting. Those designed for casting have light spools,



Students learn the skill of bait casting.

large arbors, precision-cut gears, and small handles. They work equally well for still fishing or for casting artificial lures, and are the ones to be used in school casting programs. (Space does not permit a listing of specifications for equipment needed for such programs. This information may be obtained by consulting the Associated Fishing Tackle Manufacturers, fishing tackle salesmen, expert fishermen, fishing tackle manufacturers' catalogues, and manuals such as the one on casting published by the AAHPER for use in the Outdoor Education Project.)

Cost of the Program

There are three phases of a casting and angling program to consider. *First*, casting has value as a skill to be taught. It is easy to learn; pupils with normal coordination acquire the skill readily and improve rapidly with only a few minutes' daily practice. This improvement may continue over a period of months or even years, and may be measured by standards classifying casters according to scores and achievement. Casting is practical to teach because it can be done on a gym floor, on a lawn, or on water. Swimming pools are excellent for water casting.

Second, casting is a highly desirable competitive sport. Pupils may compete with each other on an informal basis. Boys—and girls, too—may stand side by side and test their ability to cast at targets. Or, organized casting tournaments may be conducted according to the rules and regulations set up by the National Association of Angling and Casting Clubs. The NAACC is the control organization for the sport of casting. Through it may be secured rule books, equipment, and appropriate awards for those competing in tournaments. Tournament events test casting for distance and accuracy, with the major emphasis on accuracy.

The word "Skish" has come to be almost synonymous with the term "tournament casting." Originally "Skish" was used to identify tournaments events that required standard fishing tackle rather than specialized equipment. In the past few years fishing tackle has been perfected to the point where over-the-counter tackle functions as well as any that is specially made. Now, practically all competition is with standard equipment and the only difference between Skish and other accuracy casting is in scoring. In Skish, a perfect cast has to be made at the target to score points, while in other accuracy casting the caster is given credit for near misses. For example, near misses lose points according to the number of feet the plug or fly lands from the target. In both types of event, the system of scoring is so well defined and easily judged that competitors may score and judge each other.

Carry-over Value

Third, the school-casting program provides an activity with exceptional carry-over value. Students learn the skills of casting while in school, join in the fun of competition with fellow students, and use the skills that are acquired through the activity as a recreational pastime the rest of their lives. Fishing not only serves as a common interest for young

companions, outdoor club members, and business associates, but it also is often the main activity of a family group vacationing and camping.

A casting program carries over not only into life after school years, but also into many other outdoor activities such as camping, hiking, scouting, boating, and water safety. To cover the subject adequately some outdoor safety instruction must be included. The program offers an opportunity to teach both water safety and safety practices dealing directly with the use of tackle.

Finally, a casting program leads into related activities such as rod making and repair, fly tying, and camp cooking. Projects such as earthworm raising, the propagation of minnows, and field trips to nearby parks, forests, and streams may be used in conjunction with a casting program as an outdoor approach to science and conservation education.

Archery

The fascination of human beings for shooting bows and arrows is so natural and universal, one almost suspects the coordinations to be basic neural patterns of the species *homo-sapiens*. The lure of archery for those properly initiated is inescapable. Like victims of cupid's darts, archers, once hit by the love of this sport, find archery a life-lasting challenge in their hearts.

Abandoned in warfare since the advent of gunpowder, it is now said to be our fastest growing sport. Instead of giving all the emphasis to such team sports as football, basketball, and baseball, the programs in recreation and physical education of modern high schools and colleges are including archery and other sports that can be continued profitably during our expanding leisure time. To understand why this sport is developing so rapidly in secondary school and college curricula, consider the following statements. Archery:

1. *Is interesting to people of all ages.*
2. *Can be easily adapted to different ages, sizes, and sexes* since bows are made with different drawing weights or pressures, and arrows of different lengths. A small girl gets great satisfaction from shooting her 15-pound bow. An eighty-year old keeps his interest and youth by shooting his 20-pound bow at a target in the back yard. The strength of the strongest football player is challenged by shooting a hunting bow of 45-80 pounds or an elephant bow of one hundred pounds drawing weight.
3. *Is well adapted for use in the individual physical education program*, for the same reasons as those in 2 above. Persons with many different types of physical defects can enjoy archery throughout their lives provided their arms and hands are normal.
4. *Can be enjoyed alone (trying to beat one's own record), or in a group.*
5. *Is an excellent family sport.* Parents and children, each with their own archery tackle, are welcomed at the target archery range of

school or city recreation department, at the field archery course range of the local field archers club, or on a roving expedition of their own hills and through meadows and woods with a picnic at the edge of a brook.

6. *Is an excellent co-educational sport.*
7. *Is an all-season sport: spring and summer for challenging practice and tournaments in both target and field archery; fall and winter for hunting with the bow. Hunting and roving in deep snow with snowshoes just adds more challenge, adventure, and fun.*
8. *As William H. Kilpatrick⁴ would say, is a "leading-on activity."*
 - a. Its lure, lore, and skill are life-time challenges.
 - b. It leads on into conservation study and practice. Its philosophy is one of good sportsmanship relative to hunting game.
 - c. It leads on into the area of *crafts* since all archers in a short time learn how to make their own bow-strings, repair arrows, and many of them make their own bows, arrows, and other items of archery tackle. This leads on to the creative designing of new types of bows and arrows. This, of course, happens in home, basement, school, and recreation shops, as well as carrying over into the hobby shops of camps and clubs.
 - d. The concomitant learnings are many and varied, stimulating interests in trees and their uses as one learns the different native woods that make bows—osage orange, yew, Tennessee red cedar, hickory, sassafras, etc. One learns the characteristics of these woods by seeking them in their native surroundings, cutting them, seasoning them, and fashioning them into bows. One is also sometimes led abroad in the study of foreign bow-woods and arrows.
 - e. It frequently leads on to the study of fascinating and complicated problems of physics as one designs new bows with greater cast and flatter trajectory.
9. *Done in proper form, causes a wholesome stretching and relaxing of the cramped, fatigued muscles that keep us humped many hours a day over our desks and work benches. It necessitates holding heads and chests high, and strengthens the muscles that hold us in good posture.*
10. *Places a premium on the individual's willpower, muscular strength, and neuromuscular control; and gives one the keen satisfaction of seeing the arrow fly true as a result of one's own effort—and this leads on to ever higher adventure.*
11. *With well-trained instructors, is one of the safest of sports. Proper interests, knowledge, attitudes, and skills in archery must be learned by all who would enjoy this challenging sport. Therefore,*

⁴ Kilpatrick, W. H., *Source Book in the Philosophy of Education*.

these must be taught by trained teachers and leaders *so well* that, when people engage in archery, they will shoot the proper way, which is the safe way.

With well-trained instructors, archery is easily and effectively taught even in large physical education sections or classes of thirty to forty pupils. It is easy to grade archery objectively since the arrows are scored by points according to whether they hit the bullseye or in the five colored rings surrounding it.

Rainy-day classes are more than filled with lectures on history of archery, showings of old and new types of bows and arrows and their advantages and disadvantages; of movie films and stripfilms contrasting good form and bad form; conducting a form clinic, testing students on rules, and their ability critically to analyze the shooting form of others.

The Archery Club Approach

Archery can also be taught very effectively in the high school through a co-educational archery club if the leader or faculty sponsor is well trained, an expert performer, and an enthusiastic hobbyist. With the club approach, making one's own tackle in the school shop is a natural development, as well as field trips to city, county, or state park archery ranges. Trips to field archery club ranges and to forests and fields on informal roving and hunting expeditions in season are easily arranged. School archery clubs frequently build their own field archery courses of fourteen or twenty-eight targets on their own school forest land, on a state park or forest, or on the land of an interested farmer or landowner glad to lend the land for such a worth-while purpose. The school archery club should welcome contacts with other clubs in the community, engage in tournaments with them, give joint public demonstrations, and join forces to conduct archery clinics for the instruction of children, youth, and adults in the community and cooperate with the city recreation departments in conducting archery tournaments. Whether archery is taught through physical education classes or recreational clubs, many interesting tournaments can be conducted both for boys and girls in many standard and special events in both target and field archery.

Field Archery Versus Target Archery

In target archery one shoots various rounds which consist of specified numbers of arrows at particular known distances from the targets. In this kind of archery also, either "the point of aim" or a "sight" on the bow is used as a scientific aid for aiming from the different known distances. In field archery, however, no artificial aiming device of any kind is used, and all distances shot are unknown to the archer. This method of shooting, with its anchor position on the face closer to the eye than for target archery, is called "instinctive." It is the way Amerindians and all primitive peoples tended to shoot. For short hunting shots up to forty or fifty yards with distances unknown, instinctive shooting can be very accurate and effective. However, both target and field archery take long, regular,

and constant practice for the most satisfying results. Both field archery and target archery should be taught in secondary-school programs. There is a place for both types. In fact, field archery (the least frequently taught) is much the most popular phase of archery today and is responsible for the present tremendous development of public interest in archery.

Equipment

Equipment for a school or club archery program is relatively inexpensive. Satisfactory lemonwood and fiber-glass bows can be purchased for about eight dollars a piece. Arrows will cost \$5 to \$7 a dozen; and regulation four-foot diameter target butts, around \$14. Very satisfactory standards to hold the targets can be made easily by custodians or the pupils themselves in the school shop. Target faces will cost around three dollars a piece, but they can be made for much less in the school shops out of unbleached muslin or heavy oilcloth.

Community Consultants

In every community the country over, there are archery enthusiasts who will be very glad to help school personnel starting archery in physical education classes or in recreational interest clubs. Find out who these people are from your local recreation director or from the Y's, or Scout's headquarters. Better yet, send one or two of your instructors to the national archery training camp, Teela Wooket Camp, Roxbury, Vermont.

Aquatic and Small Craft Activities in Outdoor Education

The importance of aquatic and small craft instruction in outdoor education is indicated by the fact that an estimated 100 million people go swimming and bathing in the United States annually, and twenty-five million take part in recreational boating. Acquiring skills and knowledge in boating, canoeing, or sailing equips the individual to handle his craft wisely, safely, and skillfully. It trains him in methods of rescuing himself in adverse circumstances or specific mishaps. It prepares him to perform efficiently and well in helping or actually rescuing others who are in difficulty or danger. Possession of this type of skill in handling small craft makes the art in itself a thing to be pursued and enjoyed.

Boating Develops Skills and Attitudes

Sailing a boat challenges the sailor to combine knowledge, skill, and coolheadedness in successfully engaging and utilizing a force of nature. Handling a rowboat may invitingly blend skills of the old-time fisherman with those of the Olympic sculler to become stimulating in itself and attractive in its role of being basic to good seamanship in other types of boats. Safe and courteous handling of out-boards and other types of power craft results from study and application of aspects of seamanship that bring to their possessor a pride in gentlemanly conduct afloat and a desire to uphold and advance the laws and traditions of good seamanship. Efficient canoe handling may involve a range of skills from a basic few



Skill in handling canoes reduces accidents.

to a great number. Attractive to many persons because of the intrinsic wilderness character and timelessness of the craft in a supersonic age, the canoe remains essentially the same as it was many thousands of years ago in the earliest of human hands.

As skills and knowledge in all these activities develop, they often encompass one or more of the numerous special forms of aquatic and small craft activity including the following: competitive swimming, ballet swimming, synchronized swimming, diving, skin diving, diving with self-contained underwater breathing apparatus (SCUBA), surfboarding and paddleboarding, sailboat racing, sailboat cruising, rowboat racing, rowing and sculling, racing in sliding-seat racing shells, rowboat cruising, outboard cruising, outboard racing, inboard-power boat cruising and racing, water skiing, canoe racing, canoe cruising, canoe contests and special activities, white water canoeing, and canoe slalom (white water contest).

In addition, small craft handling is involved extensively in fishing, hunting, camping, nature study, and numerous forms of wilderness exploration and field study.

Safety

If preliminary swimming, water safety, life saving, and small craft handling instruction have been given, all of these activities are safer and more enjoyable. Frequently, however, due entirely to absence of such preliminary training, fishermen, hunters, and others lose their lives. In nearly all instances, the most elementary form of knowledge and skill would have prevented the loss of life. Safety instruction, therefore, must be a primary element in this phase of outdoor education.

In planning a program of outdoor education, school officials will find the agencies and organizations with programs and facilities happy to cooperate. In a great number of instances, excellent cooperation on a community level has been going on for many years. In some instances, great advancement in program has come about through similar cooperation on a state-wide level.

A survey of approximately 300 secondary schools and colleges conducted by the Outdoor Education Project of the American Association for Health, Physical Education, and Recreation and the Outboard Boating Club of America in cooperation with Michigan State University indicates that boating instruction is finding its place in the curriculum. It can be done as a club activity or in connection with other class activities, but, in any event, it will meet the needs of an increasing number of students, who have great interest in one of the nation's most popular outdoor activities.

A school principal, aware of the above facts, is confronted with the problem of how to provide efficiently information and training for his students. Large numbers can be given a minimum of instruction through the use of films. The American Red Cross has several films on swimming

and water safety and one on boating and canoeing safety. These may be borrowed from local Red Cross chapter offices. The U. S. Coast Guard has available for lending several films dealing with safe operation and legal requirements for pleasure boats, including one film entitled *Outboard Motorboat Safety*. A film, entitled *Small Craft Safety* (black and white, or color, sound, 14 minutes), has been produced by Herbert Kerkow Inc., 480 Lexington Avenue, New York 17, New York. It deals with safe handling, self-rescue, and rescue skills with rowboats, outboards, canoes, and sailboats. The Outboard Boating Club of America, 307 North Michigan Avenue, Chicago 1, Illinois, has produced a filmstrip (sound) entitled *Outboard Handling*.

The best educational results are obtainable through the student participation type of instruction, the complete course being more desirable than teaching lacking organization or done in a cursory manner. Priority should be given to swimming instruction (including water safety). Swimming authorities regard Americans as largely a nation of bathers, with relatively few excellent swimmers. A higher percentage are "good" swimmers, but the majority are able to swim only a little or not at all. This means that most people probably go swimming to relieve their discomfort during hot weather, but not to gain joy and satisfaction from performing the numerous swimming skills, which they do not possess. Through more emphasis on the development of reasonably skillful swimmers, the secondary schools could correct this condition and change the United States from a nation of bathers to one of swimmers.

The Importance of Swimming

It is important to teach swimming also as a basic survival skill indispensable to true safety afloat in small craft. Life jackets and similar devices are important even for skilled swimmers in certain types of situations but they should not be regarded as outright substitutes for swimming ability. Swimming ability ideally should be held as the prerequisite for entry into any type of small craft activity.

In developing a swimming instruction program without existing school operated facilities, the secondary-school principal will usually seek the co-operation of local organizations and agencies having such facilities and program. Often the actual instructional task may be delegated to the various organizations, with the school providing encouragement, promotional support, recognition of work accomplished, and guidance to the over-all community effort.

Many schools have found the American Red Cross swimming and life saving courses ideal for their purposes because they contain the necessary elements and are acceptable and uniform throughout the nation. The swimming courses are graduated: beginner, intermediate, swimmer, and advanced swimmer. There is a junior life saving course for children from twelve to fifteen years, and a senior life saving course for those sixteen years or older or who are in or above the eleventh grade of school.

The Red Cross *Basic and Advanced Survival Swimming Courses* are designed to prepare young people of or near military age to be safe while in or on the water. These courses are excellent for fishermen, hunters, and other outdoor sportsmen. The *Basic Survival Swimming Course* is for nonswimmers and novices. It is particularly designed for boys and girls who have reached secondary school without having learned to swim. It is appealing and far more acceptable to them than is the regular beginners course, which they regard as being for small children.

The above courses are taught by water safety instructors who are trained and qualified in courses conducted in local Red Cross chapters, at selected colleges and universities, and at Red Cross National Aquatic schools. Completion certificates for all these courses are issued by the local chapter or area office.

Piloting Courses

If local interest is in the larger types of small craft, the cooperation of the U. S. Power Squadrons should be sought. They offer free instruction to the public in the form of a *piloting course*. Other courses available to Power Squadron members are: seamanship, advanced piloting, junior navigation, navigation, weather, motor maintenance, and sail. This organization may be contacted locally or at its national headquarters, P. O. Box 510, Englewood, New Jersey.

The United States Coast Guard and Coast Guard Auxiliary provide instruction to the public in seamanship, piloting, motor maintenance, aids to navigation, rules of the nautical road, life saving, and accident prevention. Details are available from the Director of Auxiliary at the nearest Coast Guard District Headquarters, or from United States Coast Guard, Washington 25, D. C.

Without a doubt the outboard motor boat is the most popular type of small craft on the current boating scene. The Outboard Boating Club of America, which is also headquarters for the American Water Skiing Association, has the following educational materials available: *Outboard Handling* (a booklet); *What's a Boatload?* (a leaflet); *Use Commonsense Afloat* (a leaflet; also a poster); *Outboard Handling* (a filmstrip); and *The Water Skier* (a periodical).

Building on a whole generation of experience in teaching boating and canoeing safety, the American Red Cross during the last few years has developed a well-rounded program of course instruction in handling the smaller types of small craft; namely, canoes, rowboats, small outboards, and small keelless sailboats. The courses are as follows: (1) *Basic Boating Course* (rowboat handling and optional outboard handling content); (2) *Basic Canoeing Course*; (3) *Basic Sailing Course*. There is a detailed instructor's manual for each of these courses. The content of each falls into four major categories: safe handling, self rescue, skills to use in helping or rescuing others who are in trouble, and ways to apply the basic skills interestingly and safely. The courses are taught by *boating instructors*, *canoeing instructors*, and *sailing instructors*, respectively.

Winter Sports

Winter sports may be divided into two types: snow sports and ice sports. Snow sports include recreational skiing, competitive ski-racing and ski-jumping, snowshoeing, skijoring, recreational sledding, competitive bob-sledding, tobogganning, and many different kinds of games, stunts, and contests. Ice sports include skating for fun, skate-racing, skate-sailing, ice-hockey, ice-shinney, figure-skating, curling, and various skating games, stunts, and contests.

In recent years there has been an ever-increasing interest and participation in these winter outdoor activities not only by those who live where there is snow and ice, but also by those living outside the snow and ice belt who, out of curiosity, have ventured a vacation in winter where these sports thrive.

A recent study by the Research Committee of the Central Association for Physical Education of College Women shows that ice skating and skiing are used more commonly after college graduation than they were during college years. These interests have generated a need for programs of effective instruction and planned experiences for high-school students. Many individuals do not have the knowledge, skills, and appreciations necessary to derive the greatest benefit and satisfaction from these vigorous and highly developmental activities, some of which have been described by enthusiasts as not a sport but a way of life.

Our modern way of living is characterized by an apparently ever-increasing time for leisure and a seemingly parallel commercialization of this leisure in such directions that indulgences threaten our future as a vigorous people. The increasing interest in winter sports may in itself be both a conscious and a subconscious effort to prevent deadly outcomes. At any rate it would seem wise for our educational system to explore and exploit the educational potential of these activities that contain really dynamic development and recreational opportunities for richer living. They are challenge and adventure!

Stimulation of the Spirit

Some of these sports such as competitive skiing, skating, and bob-sledding demand and stimulate the fighting spirit, the keen and fighting mind. What more valuable contribution can a school make to the development of an individual than an enduring spiritedness, a high personal morale? What one of us is not reminded by circumstances, now and then, that living successfully demands coolmindedness and courage in the face of fear? Ski-jumping, the world record of which is perhaps the greatest athletic feat, requires all of these and more. Achieving levels of performance in skiing and skating demands self-discipline; and let us not forget that self-discipline is still the basis for great accomplishment in any worthwhile human endeavor.

These sports tend to promote development of the obedient and efficient body under command of the fighting mind. The body's developed skills,

vigor, strength, and endurance become the efficient tools for effective and successful action. Let us not forget, too, that these accomplishments encourage a respect for the human organism that comes with the pursuit and achievement of high development. They lead to self-respect and self-reliance and are some of the tools, which, when put into the individual's hands, give him the power to help himself. Certainly this represents no small assistance to effective democratic living.

These outcomes should be objectives of high caliber leadership, which, with modern knowledge of method, can and should see to it that a far higher degree of skill, vigor, and endurance is reached than is commonly achieved. Furthermore, these sports tend to engender a high regard for excellence, which is a basic value in a people whose welfare depends to a large extent upon the superiority of mind, character, and ability of its leaders. The school can reveal to the individual that the delights of skillful sports movement are as necessary to a richer life as any other special ability he seeks to acquire in his youth. It should deepen and enrich the youth's awareness of the possibilities for development and enduring happiness that lie in these winter recreations.

The writer is reminded of a remark made by a young teacher whom he had helped to learn to ski. This young man said, "You know, the winter is over and I have always dreaded the winter season. Yet somehow I feel different this spring. It is hard to believe, but I am already looking forward with eagerness to next winter." Thus a new adventure in movement became a rich and rewarding experience. It is the opportunity for living on a higher level of enjoyment that our people must discover.

The building and care of ski-slopes, ski-jumps, ski-trails, skating and hockey rinks provide many opportunities for valuable work experience especially for those who have not worked much with their hands. In many localities schools can acquire land adjacent, or close, to the school site upon which can be built these snow and ice facilities. With informed and adequate leadership, the building of these facilities by students can represent an experience of considerable value to the individuals concerned and can be a distinct contribution to the community. It is important to note here that the individual not only builds things, but, in the building, makes himself.

Rich in Social Values and Aesthetic Enjoyment

Winter sports are not only individual in nature but are also rich in social values. They are full of opportunity for fun and learning with others under circumstances which promote good feeling and friendship and deepen understanding. They afford an excellent opportunity for the acquirement of good sportsmanship under trying conditions. They can become sparkling and exciting recreational habits in a wholesome setting.

The writer will long remember Canadian children frolicking with their dogs on slopes at St. Jovite. These children had made simple harnesses for the dogs and had trained them to pull the skier to the top of the

slope where dogs and children took off downhill in a swirl of snow and vocal excitement. A more effective and satisfying upski, a happier group, this writer has seldom seen.

Finally, ski-touring across snow-covered fields, streams, and forests discloses numerous vistas of beauty and solitude wholly unknown to those who, unlike their ancestors, have not ventured into the hills and back-road terrain at this time of year.

Winter fairylands unfold before the eyes. Aesthetic feelings and appreciations well up within that enrich life. The varying moods of winter as seen from a picture window are as nothing compared with seeing them while snowshoeing or skiing in the out-of-doors. Actual physical contact with our natural resources of forests, streams, and wildlife, and the local geography surrounding our communities in a winter setting, lead to new appreciations long remembered.

To anyone who has experienced them under conditions of capable leadership and good companionship, winter sports are a gift of satisfactions that endure and a rich source of a better life.

Nature Competencies

Millions of Americans achieve satisfaction out of interests in the out-of-doors. These interests may range from sheer aesthetic appreciation to intensely technical scientific inquiry. The satisfaction gained therefrom is based on what Aldo Leopold called "perception." "Perception" involves the response of people to the variety, complexity, and interrelatedness of natural life. It implies a sensitivity on the part of the perceiver to forms, colors, movements, and sounds. It is related to knowledge in its various aspects, including those principles which give the universe its deepest meaning.

Leisure interests among secondary-school students often become highly specialized. What may have been a general interest at the elementary level, may become an interest in astronomy, mosses, fossils, or some other particular field. The student may, however, retain concern for the interrelationships of all living things to each other and to their environment. The secondary-school student may also develop a high sense of responsibility and stewardship, becoming greatly concerned with problems of conservation.

Many of the knowledges, skills, and attitudes of the regular school science program may now become the basis for leisure-time pursuits. They may be engaged in as personal hobbies, as part of special interest clubs, or as incidental parts of the activities of home, club, or vacation.

Specialized competencies in nature are practically unlimited. The following are but a few of those that involve secondary-school youth.

Outdoor Field Experiences

These experiences may include the exploration of woods and fields along with a group or with a naturalist. Such trips usually are concerned with all aspects of the out-of-doors, with emphasis on ecology, human

uses, and Indian and pioneer backgrounds. Some trips may concentrate on specialized fields such as geology, water biology, spring wild flowers, birds, fungi, or trees.

Students may make such trips alone. The many excellent nature field books now available make it possible for one to do a great deal of field study and identification alone. Or students may go in small groups, learning from each other and sharing a fruitful experience. However, going out with a leader who knows and loves the out-of-doors is for many the most satisfying type of field experience.

Special Interest Clubs

Clubs with special interests such as biology, astronomy, or conservation are common in schools. Often the science teachers serve as sponsors. Such clubs may conduct varied programs of demonstrations, talks, discussions, field trips, and conservation projects. Entirely voluntary in membership, the clubs have important educational significance in that they increase knowledge and skills and provide opportunities for vocational exploration. The following are some of the nature activities in some of the specialized fields.

Astronomy

Telescope making

Construction and use of starfinders, sun dials, and miniature planetariums

Observation with or without telescopes

Star photography

Biology

Exploration trips to study water life, reptiles, amphibians, insects, birds, trees, flowers, etc.

Wildlife studies of specific areas such as watersheds, lakes, streams, etc.

Stream improvement projects

Construction and maintenance of terraria and aquaria

Collections of insects, leaves, etc.

Research projects on life histories, distribution, etc.

Plant succession

Geology

Field explorations to get acquainted with local geological features

Collecting trips to gather rocks, minerals, fossils

Classifying and mounting of minerals for study and display

Gem polishing (lapidary work)

Mapping

Nature-Related Arts and Crafts

Use of native materials such as clay, wood, stone, and fibres in craft programs

Construction of equipment used in nature programs such as terraria, collecting nets, weather stations, display cabinets, etc.

Reproduction or interpretation of nature through photography, painting, sketching, plaster of Paris casts, printing

Displaying of nature materials through simple collections, habitat displays, and museum-type displays with interpretive materials

When the nature proficiencies are engaged in as leisure-time pursuits, we may assume that satisfaction comes to the participant more or less



Students use native materials for furniture and equipment.

directly from the experience. Although the content material and outcome may not be essentially different from those of the classroom, the motivation is internal. Interests of lifetime duration may often result from these experiences.

Outdoor-Related Arts and Crafts

Outdoor-related arts and crafts (also called "nature crafts" or "native crafts") are those that utilize primarily the things that can be found in their natural setting in the out-of-doors—scouring rushes (*Equisetum*), cattail leaves, dead wood, and grapevine bark are only a few examples of these materials. With the aid of glue, string, a pocket knife, or perhaps a tin can, these things can be transformed into objects of practical use or of esthetic value.

The joy of creating is an important, basic experience for everyone. The size of the undertaking is of little importance. What matters most when using native crafts is for the person to realize that the joy of making something can come from other than commercial sources—and the need for this realization is indeed necessary in this materialistic world of ours.

If nature crafts are to be looked upon as a truly outdoor educational experience, the youth participating will be a part of the craft project from beginning to end, collecting materials, preparing them for use, and then finally changing them from their natural state into a utilitarian or esthetic object. These crafts *can* be carried on in the classroom; but, if the teacher collects the materials herself and brings them in, a great deal of value of nature crafts is lost.

Nature crafts automatically find their niche in a school-camping program and can also grow very easily out of a field trip experience. A unit of study on nature crafts is an excellent way of enriching secondary-school arts and crafts courses. Integrating the native crafts experience into other aspects of the educational program is, of course, a highly desirable thing. It can easily be accomplished in a school camp program or in schools having a core curriculum. Crafts need not always be a major project and limited to a scheduled craft period. Wherever possible, they should grow out of other activities. For example, science students, while studying stream-side growth in the spring and the rebirth of life in vegetation that has been dormant through winter, may end up by making willow whistles from the straight, smooth stems of the "pussy willow."

Although the importance of using native crafts in preference to kit-crafts in a school camp experience is recognized by those interested in outdoor education, it is also apparent that many people resort to transporting material and supplies to the outdoor setting and do such things as woodwork with prepared lumber or even kit crafts because they feel inadequately prepared to carry on any type of nature crafts with their groups. How much more secure we feel when teaching things with which we have had some personal experience! One cannot stress strongly enough the need for actual experimentation on the part of the leader before work-

ing with his group, rather than just reading about the proposed project in a nature craft book.

Many leaders working with teenagers have expressed their need for finding nature craft ideas that will appeal to older children. The following are a few craft ideas which have been selected as suggestions for a teenage arts and crafts program. It should be stressed again, however, how important it is for the leader to try these crafts first.

Twig Vases. Glue narrow twigs a bit longer than the height of the can to the sides of a small tuna fish can or other suitable planter. Use a rubber band to help hold the newly glued twigs in place until they are dry. The twigs give a very pretty "picket fence" appearance to the vase or planter.

Black Walnut or Butternut Seed Sections. Using a hack saw, cut slices crosswise through the nut. Hold the saw between your knees or in a vise with the cutting edge up and run the nut back and forth over the saw to cut it. This is unconventional, but it prevents binding which occurs when the nut is held in the vise. If the hacksaw will hold two blades, separate the blades at either end with matchsticks; then two cuts can be made at the same time, insuring even slices. When sanded and waxed these sections make beautiful buttons, earrings, or belts.

Seed Jewelry. Seeds of various sorts—cantaloupe, watermelon, corn, etc.—can be strung into beautiful necklaces and bracelets. Soak the seeds for an hour or so to allow the needle to penetrate without splitting the seeds. Seeds may also be glued to earring backs to form rosettes.

Fungus Etching. Growing on the sides of trees, stumps, and logs in many parts of the country may be found a woody, shelf-like fungus with a very white underside. Gather these bracket fungi during their growing period, which is approximately April to September. During this time the slightest touch on the underside of the fungus will leave a dark brown mark on a white background. Sketch a picture on this white surface with a twig, knife, or nail within twenty-four hours after picking. Put it aside to dry for about a week. These etched bracket fungi make beautiful decorative pieces.

Log Book Ends. Saw a log about five inches in diameter into eight-inch lengths. Then saw it lengthwise into two half-logs. Scrub the bark. Attach the bark to the wood securely with brads around the edges. Stand each half-log on end and attach a flat, rectangular piece of tin to the underside to be used as a base and to insert under books. Attach felt to the tin to keep it from scratching the table. Designs may be woodburned on smooth, light bark such as birch and beech. The bark may be shellacked if desired.

The alert teacher will see possibilities in many other native media—mats woven of cattail leaves, ceramics from native clay, wall hangings and planters created from driftwood, dyes made from berry juices, and lapel pins from seeds, whittled wood, types of fungi, or feathers. The opportunities are limited only by one's imagination.

Orienteering

A remarkable and effective new program for creating and maintaining a lasting interest in self-education for outdoor life is gaining wide popularity in the schools of several countries. It may sound strange but in the term "orienteering" itself is found one of the answers to the question why this program has had such success. Instead of talking to

youngsters about map-and-compass instruction you talk about orienteering. And immediately it sounds like a sport, a game—something that is fun, enjoyable, instead of some kind of regimented teaching.

Popular in Europe

This program of map-and-compass study was first introduced in Sweden in 1917-18. It quickly spread through Europe as both an educational and sports program. Now orienteering is a compulsory part of the curriculum in Sweden and Norway. It has developed into one of the most popular national competitive sports for men, women, and children from nine to ten years of age and over, not only in Sweden and Norway but also in Denmark, Finland, and Switzerland. Five years ago its educational values were recognized in Canada, and orienteering became an adjunct to courses in social studies and geography in the schools of the Province of Ontario. In the United States the program of orienteering is now in general use by the Boy Scouts, the Girl Scouts, Camp Fire Girls, other youth organizations, and also by camp counselors. It is involving an ever increasing interest and acceptance among some secondary schools.

Skill Learning and Sport

Orienteering can be included in an appropriate place in the school's outdoor program. It can be divided into two main parts: first, there are educational, theoretical, and instructional aspects that develop skill in map reading and love for the out-of-doors. And this is where the schools should come in more actively. Second, there is the expanded development of this instruction into a competitive sport. There are different variations, ranging from simple recreative games and contests, preferably combined with conservation and nature lore, to the more intricate cross-country races, where map and compass is used to locate certain control stations in unknown territory.

To summarize, orienteering has made the teaching of map and compass easier and more effective; it has made the learning more enjoyable and interesting. On the basis of using map and compass, a completely new sport has developed.

Map Reading

In the orienteering program, the theoretical side is de-emphasized, especially at the introductory level. Children want to know the objectives before they enjoy learning the finer points and parts. Map reading should, therefore, never be just that! In orienteering, map reading is just a part of the whole process with much practical use in games and fun exercises, organized in such a way that there is a permanent contact in the pupils' minds between the theoretical teaching and the purpose of it. Orienteering, with its many practising games, gives the fundamental teaching in map-and-compass use a meaning from the beginning; the learning becomes a part of the fun and is acquired more rapidly. The knowledge itself becomes more solid.

An Outdoor Avenue

When youngsters have learned how to use map and compass intelligently, it does not necessarily mean that they will ever get interested in orienteering as a competitive sport. But they have gained confidence in their own ability and skill, and they have developed proficiency and experience in fending for themselves in the woods. By doing so, they have unconsciously assimilated a favorable attitude towards outdoor life of all kinds, which will give them lots of enjoyment and help to create and maintain their physical fitness from childhood throughout their lives. And there you have the greatest value of orienteering.

Principals of secondary schools who desire to consider the merits of orienteering as a possible new subject to include in the curriculum will find informative and organized training materials at their command. These were developed with the cooperation of educators and leaders in youth organizations.



The outdoors becomes the classroom for skiing instruction.

CHAPTER III

Facilities and Resources for Outdoor Education

"In the woods we return to reason and faith."—Ralph Waldo Emerson

1. LANDS, PARKS, AND AGENCIES

THE application of the meaning of the word *facilities*, as stated in the dictionary, applies best to outdoor education programs. Therein it states that facilities are generally physical things which promote the ease of any action, ease of operation, or course of conduct. Facilities for outdoor education, such as lands, certainly do promote ease in the course of conducting such programs. Almost all public lands, their curtilage, and other accommodations lend themselves to these purposes, as often do some privately owned lands.

Available Lands and Parks

For the most part, public lands are dedicated for specific uses in accordance with statutes which were adopted before the current surge to the out-of-doors took place. However, the purposes for which they were dedicated are stated in broad terms, and, therefore, by implication they include the purposes of and services for outdoor education. Many of these public lands, especially parks, were dedicated for the public enjoyment of natural beauty and for the perpetual preservation of their natural characteristics for enjoyment by the public. Some were, and today others are, dedicated to preserve their historical association and significance, and as places for the enjoyment of public recreation. These concepts might easily include the purposes of education, and beyond that, the *enjoyment of education!* Cognition is given to the real and thrilling enjoyment found in outdoor education.

Some of the public lands which have been used for outdoor education include parks, forests, refuges, reservations. The experimental woodlots, nurseries, and similar areas on state-supported college campuses; similar lands owned by school districts; and many others of this kind provide outdoor laboratory opportunities.

In addition to these, there are properties in private ownership. They vary in size even more than the public lands, from small individual farms and clubs to the immense acreages of lumber, mining, ranches, and other commercial enterprises. Some of them are already under use. Others hold promise for use in the near future. It is a fact, for example, that the

Weyerhaeuser Timber Company of Tacoma, Washington, has opened the doors to its vast holdings to the public for outdoor activities. Although the activities are currently labeled as recreational, those who are aware of the educational potential perceive the obvious parallel for educational experiences in camping, hunting, fishing, hiking, skiing, bird watching, archery, exploring, sightseeing, picking berries, collecting rocks, photography, and many other activities of this kind.

The Company, in making its lands available, seeks and hopes to educate people properly in the use of the out-of-doors. Could there be a better way to accomplish this than by outdoor education programs in collaboration with professional educators? What a perfect opportunity of mutual concern and interest, citizenship!

Perhaps it would be of interest to read the reprint of an address presented by Frederick Billings, Public Recreation Administrator of Weyerhaeuser, to the thirty-sixth annual meeting of the National Conference on State Parks¹. He states that ". . . people are going to use our lands for outdoor activities . . ." Then he touches upon a number of principles that apply to education's ideal of better citizenship, less vandalism, and more enjoyment of living for the people of today and tomorrow.

The nature and interpretive programs of the National Park Service are well known. These programs, which have been popular for many years, are increasing. State parks and other park administrations are adding them to their over-all park programs. The interpretive program, for example, has been extended to include four major parks administered by the Province of Ontario, Canada. It is a trend all over the nation, and outdoor education has the possibility of reaping much benefit from it.

Expansion of Park Services

It is encouraging for outdoor education to note that, in the face of increasing, heavy park use and strained budget emphasis on repairs and maintenance, some park authorities are adding interpretive and public relation services because of their *educational value*. Naturalists are being added to park staffs to conduct park patrons on guided tours and trips. In addition there are building programs including the construction of museums, zoological gardens, group camps, and other facilities. Park administrators are also preparing exhibit and display materials, and have increased the attractiveness and availability of descriptive folders and brochures. Some are conducting, or may be encouraged to conduct, regular radio and television programs on land use and local history and wildlife; talks on travel and exploration to local points of interest; tales of fishing, hunting, and adventure. All of this activity is of value as facilities and resources for outdoor education.

¹ *Planning and Civic Comment*, December 1956, pp 51-60, American Planning and Civic Association and National Conference on State Parks, 901 Union Trust Building, Washington 6, D.C.

Many of these park services are recent developments and indicate changes in administrative policy. A policy change is noted in the Tennessee State Park system. State park naturalists were used to assist camping agencies using state park group-camp facilities in teaching appreciation of their camp environment. This service is now available through the Tennessee Game and Fish Commission, which provides group-camping agencies with a game and fish counselor. Outdoor education programs as *educational projects* under *educational administration* have an obvious opportunity here. A favorable setting for team action with the parks for mutual purposes.

It should be recognized that the facilities on public lands available for public use must be made more desirable. As more park authorities recognize this fact, they will be rewarded with less ruthless wear and destruction by a public that has learned appreciation through more satisfying experiences. Programs of outdoor education could perhaps spearhead this drive for public education. It would be well for park men to cater to the development of outdoor education programs with this end in view. This has been proved, at least in Michigan.

Expansion of Michigan Camps

The Michigan Department of Conservation's Parks and Recreation Division at first provided little more than bare essentials in group camps administered as state park facilities. Now it has refurnished and insulated the old camps and constructed new ones to encourage use the year around. Dishes and utensils are furnished. There is electric power and fuel oil heat. It was found that better facilities, in terms of quality, invite more use, which in the long run returns dividends by way of proper use of lands and facilities. Better understanding and sympathy is promoted for conservation policies and problems. Excerpts from the magazine, *Michigan Conservation*, January-February 1957, in an article titled "Classrooms in the Snow at State Parks," by Harold Guillaume illustrate this point.

"... growing, interesting and instructive educational program now under way in a number of Michigan's state parks . . . takes an annual 8,000-9,000 youngsters . . . and gives them a week or more in a natural setting . . . These youngsters hardly notice during their week away from (school) classes that schooling, that insidious process, is still going on . . .

"The camps work in a very simple and inexpensive manner. Any community school system can contract with the conservation department to send its junior graders to any of the state's various group camps . . . in conveniently-sized groups, the youngsters are taken by car or school bus and deposited at the camp . . .

"During this week, the youngsters are supervised by teachers from their own school system and by resource personnel from the department and other agencies . . .

"They go on hikes and learn woods lore . . . plant trees and stage cook-outs . . . go fishing and hold pint-sized nature expeditions . . . learn the best way to build a camp fire, how to cut wood and make protective lean-tos, how to catch fish through the ice . . . learn what is meant by a healthy, productive forest and how it needs care and harvest . . . They visit local installations such as sawmills, forest fire control stations, tree farms, game cover plantings, and whatever other activities the area offers . . .

"This unique program started in Michigan in 1948, when leaders from the Department of Public Instruction and the Conservation Department found that the . . . group camp program could be put to work in the winter for school camping. Group camps were originally designed to accommodate summer groups . . . the so-called fall-winter-spring 'off season' now sees camps visited by twice as many . . . as use these facilities in the summer . . .

"They (educational leaders) see in school camping a method of getting students involved—with both feet—in studies of social science . . . biology . . . physical education . . . and other 'academic' pursuits . . .

"Youngsters also complete many projects for the cause of conservation during their winter camping. They build dams for small floodings and plant eroded hillsides . . . build brushpiles for rabbits . . . also for fish . . . placed on lake ice to sink during the spring thaw and provide underwater habitat for game fish . . .

"The conservation department, too, would like to continue and expand this cooperative educational program that makes such a splendid use of a natural resource. Department leaders see school camping as a way to touch our growing citizenry . . . with the principles of conservation and outdoor living . . . But one thing is certain . . . the present program will continue to hold a secure place in the plans of many educators . . ."

The activities mentioned in the foregoing excerpts suggest the kinds of outdoor education use group-camp facilities afford and the kinds of resources available. Attention was purposely directed to them in the selected quotations, as well as to the cooperative arrangement enjoyed by the two state governmental departments of public instruction and conservation. It is an example of excellent rapport from which outdoor education has prospered.

Another classification of camp facilities includes those owned by agencies and private operators. These are Boy Scout, Girl Scout, Campfire Girls, 4-H club, YMCA, YWCA, church-owned, and other camps. Although many of them are not constructed for cold weather seasons, they are satisfactory for use in early fall and late spring.

It is encouraging to know that some agencies involved in new camp construction projects are building all-weather facilities so that their own programs may be extended. Since the agencies conventionally conduct

their camp activities on weekends, they would probably be glad to make arrangements for use of their camps on school days when there would be no conflicts for use. The locations of these camps, generally on a lake and in a woods, provide ideal outdoor settings.

Learning Potentials on the Land

There are still other facilities, both publicly and privately owned, that may be utilized for outdoor education programs. Some facilities may serve only specific purposes, perhaps, and by their very nature are limited to certain kinds of use. Their potential should not be overlooked. For example, consider old cemeteries. They are an important historical link between bygone pioneering days and today's modern world. Old cemeteries have proved to be interesting in many ways through the reflections of students and teachers while reading and musing about the inscriptions and dates on the headstones and tablets. At the risk of again diverting emphasis from facilities to activities, a few outdoor activities that may take place at old cemeteries are mentioned.

Social histories and family associations are revealed, as well as facts and fears, beliefs, and shattered hopes. Follow-up study is self-encouraged as interest mounts concerning high infant mortality as well as high mortality among young adults as indicated on headstone dates. These facts penetrate and motivate the minds of school children. The stones marking the graves of veterans of wars often stimulate further study. The craftsmanship of stone cutting, former and new methods; the uses of granites, marble, soapstone, sandstone, and other rock materials; all of these may awaken new interest and more genuine desire for learning.

Then there are gravel pits and stone quarries from which a history older than man may be unfolded and related to today's world. The uses of the products of gravel pits and quarries, or the fact that their products may no longer be of important use, tell stories of their own and promote good learning situations. The search for fossils at these sites, as well as in the surface rock and drift waste piles around mines, is fascinating and is fun. Yet, learning continues.

The shores of large lakes and the seaside have many potentials. They, like the other areas mentioned, whether in public or private ownership, if their use is permitted, afford an unlimited fascination for "pebble pups" and others interested in collecting and examining specimens of stones, rocks, shells, semi-precious stones and gems, ores, driftwood, and other objects which await their discovery. These are opportunities for educational enjoyment. Some youngsters, having had this opportunity as youths, may become professional lapidaries, geologists, mining engineers, or scientists—or better teachers. Above all, however, whether these outdoor learning experiences will mold their future professions or not, there is something intangibly valuable about them throughout a lifetime which is based upon the human associations in these experiences, and that may help to mold a desirable character.

It is really surprising to realize that there is such an abundant supply of facilities and resources on hand for outdoor education programs. The resources go far beyond the facilities *per se*. Indeed, resources are a strengthening factor for initiating outdoor education programs. This is true particularly of resource personnel. Personnel is available at all levels and comprises a heterogeneous group in terms of professions, avocations, interests, abilities, and areas of specialization. Still, their various talents often blend and harmonize for their use in outdoor education projects. Resource personnel may be utilized as individuals or as a team. Experience has demonstrated this fact conclusively.

Resource Personnel

Resource personnel sometimes is mustered advantageously on a team basis, the mechanics of which become easier with experience. There are all sorts of combinations of resource personnel teams, obtained sometimes by special committees assigned to this responsibility in the organization of an outdoor education venture. At other times a program director may assume this responsibility, and in cooperation with group leaders (classroom teachers), coordinates services and contributions of the resource personnel obtained for the program. An Associated Press newspaper account is a helpful illustration.²

Mr. Henderson describes the program of Michigan's Iron River Junior High School, which merited the Nash Conservation Award for teacher Hoyt L. Ferm. In sequences the students learn about animals from mounted specimens, then proceed to related studies of environment; trees, streams and watersheds, and their management. He states that "The Michigan Department of Conservation pitches in with movies and with field men. So do many individuals and organizations in Ferm's community, now conditioned and at least partly populated by his graduates. Trappers tell about trapping . . . stone collections lead to geology, and that brings a trip to the area's mines, and practical explanations by mining engineers and geologists. Police officers officiate during a course of safe gun handling, the local fire chief lends authority to forest fire fighting . . ."

As indicated above, often the resource personnel representing public agencies and private concerns may form or be formed into teams to make their services more effective. It is common for governmental technicians in fisheries, parks, forests, and soils to work together, just as it is for representatives of tackle and boat manufacturers and hunting arms to work jointly to provide services and demonstrations. These field representatives of government and of private manufacturers stand ready and are on call to serve outdoor education situations. There is much learning to be had about our natural resources and about firearms, fishing tackle, boats, outboard motors, tents, camping equipment, winter sports equipment, outdoor clothing and sportswear and gear.

² "Pupils Learn About Field and Forest" by Dion Henderson, Associated Press Staff Writer, *The State Journal*, Lansing, Michigan, Sunday, January 27, 1957.

When the local level does not seem to have resource personnel available, or when the local level cannot provide desired resource personnel, it becomes the responsibility of a higher level—often the state—to give assistance to outdoor education programs. This responsibility may be vested in the state department of public instruction (chief state school officer), the extension services departments of state universities and colleges, the state department of conservation, bureau of resources, game fish, forests, or the like, state department of health, and others, or combinations of these authorities.

Inter-Agency Councils

Where there are state inter-agency councils for recreation, such as in Michigan, Ohio, Virginia, and others, for example, the availability and the coordination of these services is made quite simple. Inter-agency councils or inter-agency committees are especially effective in organizing procedure to obtain resource personnel and facilities for outdoor education programs. Through the inter-agency operation plan, all the personnel of the inter-agency members become available for services to implement and assist education and recreation projects. The Michigan Inter-Agency Council for Recreation has made significant contributions to outdoor education workshops and institutes at the state level, as well as at the local level, by serving scores of community school camping programs.

The philosophy that the state, under its sovereign authority, has the responsibility and should provide for services that are beyond the province of local government, is generally accepted.

The resources and facilities available for outdoor education programs are practically unlimited. They need but be discovered—and utilized. They are among the unique features found in the variety of outdoor education program patterns. A vitalizing effect results from their use and especially from the use of resource personnel.

There are a variety of resources to complement the facilities. They include the files of informative material, such as descriptive pamphlets and bulletins. They also include the technical data and records compiled over a long period of time, representing many years of professional work and research in natural science subject areas. This material leaps into action by interpretive processes which may be provided by resource personnel.

The personnel representing the many governmental departments engaged in administering publicly owned lands and natural resources, and the personnel from institutions of higher learning are invaluable as resource personnel for outdoor education endeavors. As previously mentioned, there are soil men and geologists and wildlife technicians, and others, at all levels of government and in colleges. They, as instructors and as interpreters, sharing the knowledge and wisdom of their life's work through their documents and informative material, bring life to outdoor education in outdoor learning situations. When invited they usually consent to serve, and enjoy their participation.

The field and office personnel of these departments and institutions use a variety of "tools of the trade," which are also valuable and interesting resources. Some of these tools are quite simple, and others are complicated instruments and mechanical devices. All of them, however, capture learning interests. A surface understanding of their purposes as tools is usually sufficient for the outdoor education student, and students usually comprehend their purposes. The tools range from such simple things as compasses, blazing axes, soil testing kits, surveyors chain, and weather station equipment to Biltmore sticks for scaling timber, Jacob's staff compasses, microscopes, Geiger counters, and others.

Most of the resources available in outdoor education programs are not costly. Materials and tools generally are free or on a loan basis, and, therefore, do not constitute an item of expense. There is no program expense for personnel used for resources, at least not often, for their services to outdoor education is considered to be a normal function of job responsibility.

Teamwork in Outdoor Education

Outdoor education can be made available to all children and youth only if the agencies concerned with education and those having the responsibility for the custody and management of natural resources are the "team" and mobilize their efforts. State and national governmental agencies of education and conservation should lead the way by joint action in making leadership and facilities available in helping schools and colleges, together with professional and voluntary youth serving agencies. The same cooperative pattern is even more important at the community level. In many outdoor programs, the harmony and cooperation is so complete that the identification of educators, conservationists, recreationists, and youth leaders is lost when operating on local action programs. In several instances, state-wide efforts have been spearheaded by joint projects in outdoor education. Such has been the case in Michigan, Ohio, California, New Hampshire, and others. Among the many Federal, state, and local organizations and agencies actively involved in outdoor education efforts of the various states are:

National:

- American Association for Health, Physical Education, and Recreation
- Audubon Society
- American Camping Association
- Isaac Walton League
- National Conference on State Parks
- American Institute of Park Executives
- National Congress of Parents and Teachers
- American Forestry Association
- National Recreation Association
- Boy Scouts of America
- Girl Scouts of America
- American Recreation Society
- National Education Association (Many of the departments)
- National Association of Angling and Casting Clubs

National Association of Secondary-School Principals
The National Rifle Association
The Sporting Arms and Ammunitions Manufacturers' Institute
The Associated Fishing Tackle Manufacturers
The Outboard Boating Club of America
American Red Cross

Federal:

National Parks Service
National Forest Service
U.S. Geographical Survey
National Wildlife Federation
U.S. Army Corps of Engineers
President's Council for Fitness of American Youth
Office of Education

State:

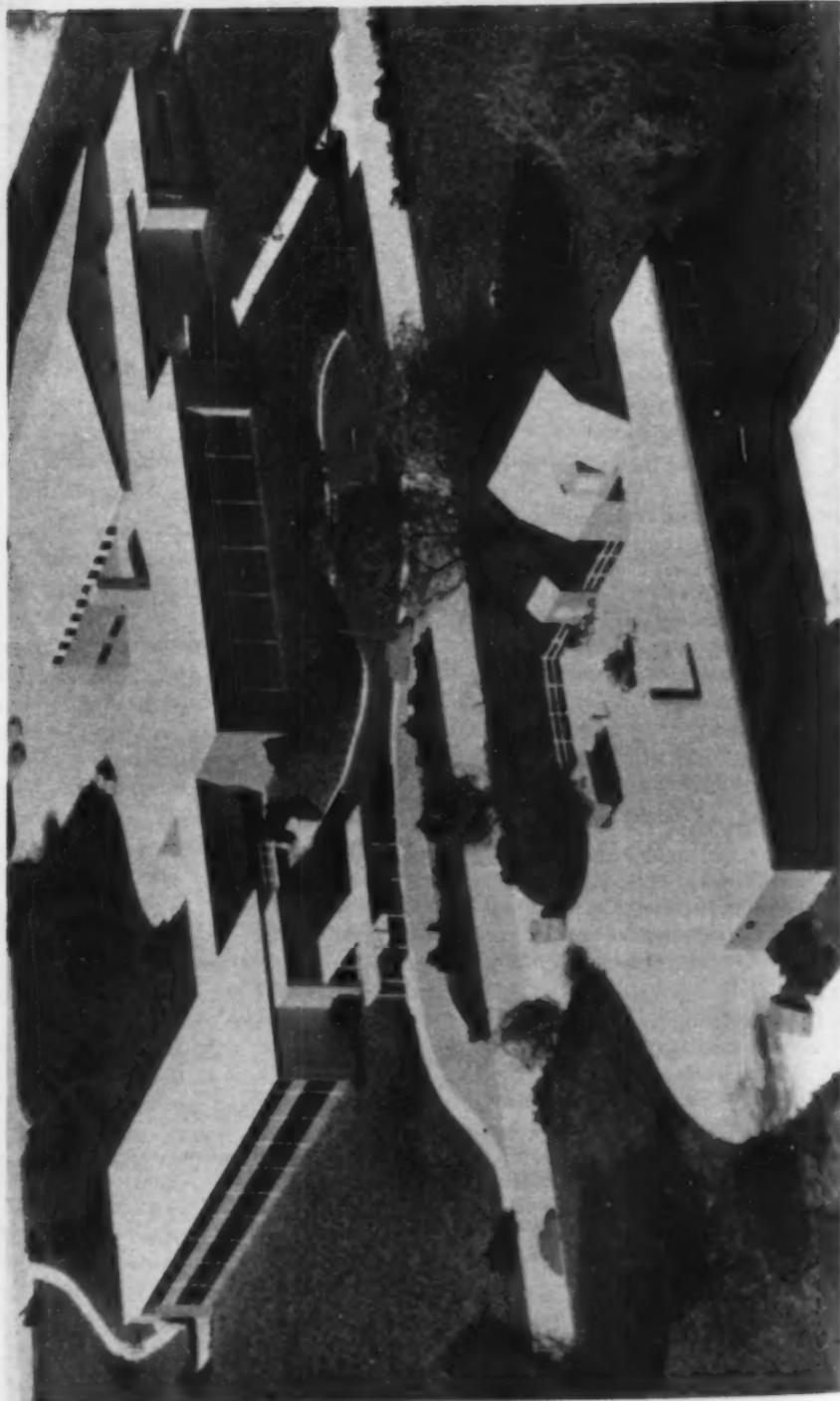
State Office or Department of Public Instruction
State Library
Department of Conservation, Department of Natural Resources
State Forest Commission or Department
State Game and Fish Department or Commission
State Highway Department
State Park Department or Commission
State Beach Commission
State Inter-Agency Council for Recreation
State Land Use Committee
State Health Department
State Police or Highway Patrol
State Department of Economic Development
State University and State College Extension Departments
State Historical Commission
Inter-State Waterways Commission
Conservation-Education Association
Board of Commerce and Trade
Soil Conservation Service
State Camping Association

Local:

County Sanitarian
Sportsman's Clubs
Garden Clubs
Citizens' Development Committee
Metropolitan or County Park Authorities
Civic and Service Clubs
Affiliates of State Recreation Associations
Sheriff and Police Departments

Local Agencies:

4-H Clubs
PTA Clubs
YMCA and YWCA
American Red Cross
The Grange
Historical Societies



The modern school, showing separate wings and structures for year-round community use.

2. SCHOOL-COMMUNITY FACILITIES AND RESOURCES

THE facilities and resources for outdoor education must be of many types because of the broad scope of the program. They are to be found in the school plants, in the vicinity of the school, parks and forests, public camp sites, and the resident camp, whether owned or leased by the school district.

The facilities for outdoor education should include certain features and resources such as soil, water, plant, and animal life that provide for opportunities, experiences, and projects on using and conserving natural resources. It is by on-the-land experiences that youth are given a real understanding and appreciation of the teeming life in soil and water as well as how the very existence of the nation is dependent on the water table, the streams, the lakes, and the productivity of the soil. Such experiences with wildlife lay the foundations for understanding and appreciating the essential place of such plants and animals in our living environment and the wise use and conservation of them.

The facilities should include the resources—some indoor as well as outside which can be used for projects and activities in developing and protecting the Nation's most valuable resource—its youth. Such indoor facilities as the crafts shop and the science laboratory may be starting points for outdoor education projects whether it is tying flies or making bows which would lead on into fishing and hunting. Starting a science laboratory may be the beginning of using the outdoors as a living laboratory and a broader understanding of the environment in which we live. Likewise, use can be made of the facilities for physical education, home-making, health education, and social studies areas which will lead on into outdoor experiences in hiking, scouting, swimming, water safety, providing for food, clothing, shelter, and gaining understanding and appreciation by the living descendants of the pioneers who built the foundations of America. It follows inevitably that from such indoor experiences youth need and should have the great out-of-doors to carry on and acquire the appreciations, knowledges, and skills for outdoor living. On-the-land experiences in the forests, the parks, conservation centers, and camps adds stimulation to many areas of education and brings the goals more closely in line with the stream of life of the community as well as the forces which have built a great democracy.

The Community or Park School

The modern school plant contains many resources and facilities for many outdoor education activities. The park-school concept which envisions the modern building in a park-like setting combines the best features of the school, the park, and the playground. Many such schools have been built in states over the nation since the National Conference on Facilities for Health, Physical Education, and Recreation projected this idea in the publication of its first Guide in 1947. Such plants contain many features and resources that can be used for outdoor education. In

such a plant the course of education can follow along with the stream of life in the community. Likewise, the community-school concept makes possible a community-wide curriculum that goes beyond the walls of the building and the boundaries of the site to deal with the problems, the hopes, and the aspirations of a democratic society for the education and development of young citizens.

In both of these concepts, the elementary school is planned and used as a neighborhood center. The site as recommended by the National Facilities Conference would contain at least fifteen acres, which includes such features as a level area for group activities, outdoor cooking, picnics, park and wooded area, and a "polliwog" pond. In many cases the site is larger than the minimum of fifteen acres. Quite often a larger site will cost less than a smaller site. In fact, there is little correlation between the size and the cost of the site in most cases. Furthermore, the cost of purchase and development of the site is usually less than five per cent of the total cost of the building.

Likewise, the junior and senior high schools are planned for use as community centers. The modern secondary-school building contains many facilities that would function in the development and extension of outdoor education projects. The park-like site would contain many features for outdoor education trips and projects. The National Facilities Conference recommends a minimum of twenty-five acres for a junior high school and a minimum of forty acres for the senior high school. The area would include level space for fields and courts and park and wooded areas with trees and water, and other facilities for outdoor cooking, picnics, archery, scouting, and the like.

As with the elementary school, the general practice is to provide sites that are much larger than the minimum. Some schools buy 150 to 250 acres which comprise a whole tract or farm so that the secondary school would be a real community center according to the park-school concept that would provide a large number of newly developed suburban areas the only opportunity for a park. Some schools, of course, provide a school garden within such a tract that gives opportunities for experience with soil, water, plant, and animal projects.

The decentralization of manufacturing, business, and marketing and the persistent movement to the suburban areas has made the construction of modern school plants a national as well as state and local problem. Such construction is going ahead at a rapid rate. One thing is certain. Schools must be built to house the increased population. It is evident that such schools are being built to serve the community and the neighborhoods where the people live. It is, therefore, urgent that imagination, vision, courage, and initiative should be used in planning the community or park school types of plant in a park-like setting which would make possible the conduct of an outdoor education program that vitalizes the whole educational curriculum and forms a cultural bond between the pioneer and his living descendants.

The Resident Camp

The Educational Policies Commission, in its report, *Education for All American Children*,³ describes the resident camps as a unit of the school system that is planned, built, and operated on the same sound basis as a school in the system. The State Departments of Education and Conservation in Michigan have developed plans for a desirable and functional school camp. The conservation department built such a camp on some of the state lands for use by schools to demonstrate and study the type of a school camp that would function best for such projects. Tyler, Texas, with the cooperation of groups in the community, has built and is operating such a camp on lands owned by the community and adjacent to a water conservation center.

The 1956 publication of the National Facilities Conference *Planning Facilities for Health, Physical Education, and Recreation*⁴ contains a whole chapter on the resident camp. It outlines guides for the development of camps for schools and other organizations. It holds to the principle that the program must determine structure and gives information on selecting the camp site, planning the layout and development, and constructing the buildings and facilities.

The selection of the site should be considered in terms of water supply and availability of electricity. The site should be sufficiently large to include areas such as a stream or lake shore, a wooded lot, and geographical and other features essential to camp experiences, such as trails, campfire circles, amphitheatres. The site should have a rolling topography rather than a very rugged or unusually flat surface. The soil should be sandy loam and porous rather than heavy clay. The site should be sufficiently large in size so that outlying camps or more than one camp unit can be located therein.

The functional design of the building would include a space for administration, areas for storage, cooking and serving food, staff quarters, offices, service facilities, and housing units depending upon the population to be served and the program to be conducted.

The resident camp provides individual and group experiences on a 24-hour a day living basis. It provides experiences for youth on a sound educational basis that ties in more closely with home and community life than other areas of education. It is, therefore, a facility that can offer many project and learning experiences that begin in the school and continue on into the life of the community. There are many resources in resident camps that can be leased until such time as the school may decide to build its own camp. Many of the private and organizational types of camps operate only in the summer months. If an arrangement could be made for leasing such camps, the owners could afford to improve

³ *Education for All American Children*. Washington, D. C.: National Education Association, 1948.

⁴ *Planning Facilities for Health, Physical Education, and Recreation*. Chicago: The Athletic Institute, 1956. Obtainable from the American Association for Health, Physical Education, and Recreation.

and winterize them so that they would be useful for a large part of the school year. They could be used in many cases during the good winter months or the spring and fall.

Conservation Resources

The forests, state lands, and large parks contain many resources for outdoor education. Some state conservation departments that have had successful experience with such camp sites are exploring the possibilities of developing the sites for use by the advanced camping group from the schools. Such sites could be developed in connection with conservation projects that would provide facilities for youth to gain the knowledge, skills, and appreciations for the conservation of natural resources and for experiences that would be wholesome, healthful, and satisfying. The goals of conservation and those of education could be attained.

Such outlying regions, camps, and state lands are much more accessible than in the past because of better roads and vehicles. America has put education on wheels and used the school bus efficiently, economically, and successfully in taking children where education can be more fruitful for self and society.

The facilities and resources for outdoor education are large, varied and abundant; imagination, courage, and initiative can bring such resources into the lives of all the youth.

3. NATIONAL PROJECTS AND PROGRAMS FOR OUTDOOR EDUCATION

ONE of the encouraging developments in outdoor education is the number of special projects and programs that have been sponsored by a variety of national organizations. Following other newer trends in education, these projects, which are designed for experimentation and action research, not only test the goodness and effectiveness of new programs, but also are instrumental in the more rapid growth of timely educational efforts. The following are illustrative of a number of new developments in outdoor education sponsored by national organizations that have a concern and responsibility for the various types of outdoor programs.

The Outdoor Education Project of the American Association for Health, Physical Education, and Recreation

While outdoor activities have been recognized in good health, physical education, and recreation programs for many years, they have not found their rightful place in the school and college curriculum in the country as a whole. Prompted by the need for leadership in teaching skills, attitudes, and appreciations for a better use and understanding of the outdoors for modern living, the American Association for Health, Physical Education, and Recreation initiated the Outdoor Education Project. Following the effective pattern in cooperative programs by business-industry-education, some of the industries that manufacture outing equipment joined with

the Association in the Project by making available grants of funds to carry forward the program. The Associated Fishing Tackle Manufacturers and the Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) have been involved from the beginning in this venture. In 1956-57, the Outboard Boating Club of America made a grant of funds to the Project for a survey of boating instruction in a selected list of schools and colleges in the United States.

Like other important educational programs, a great need is for dynamic leadership in schools and colleges in order that the 37 million boys and girls in schools and the three million youth in schools and colleges may acquire the necessary skills, attitudes, and appreciations for the intelligent use of our resources and for the constructive use of leisure time. It is evident that people cannot fully enjoy and appreciate outdoor activities such as camping, casting, fishing, shooting, hunting, boating, winter sports and others unless they have adequate training. These activities in outdoor living are related, with conservation and safety being integral parts. The Project program, therefore, is designed to intensify and speed up outdoor education programs in schools and colleges through the in-service training for leaders, interpretation of the need for and nature of outdoor education activities, program development, and the preparation of instructional materials.

The American Association for Health, Physical Education, and Recreation, through its staff and other resources, in cooperation with the departments of the National Education Association, the National Rifle Association, state departments of education, conservation agencies, representatives of the cooperating industries, and schools and colleges, is carrying forward the Project program. A national advisory committee, widely representative of school and college administrators and groups interested in outdoor education, helps guide the Project program. The Project, which will operate over a period of years, encompasses the following activities:

1. *Leadership Training.* Regional and state workshops and clinics are conducted for school and college staff members who are interested in developing programs in their own states. Working with the Project staff, the appropriate state agencies, such as the departments of education and conservation, colleges and universities, and professional educational organizations, as well as interested individuals, are in the planning and execution of the workshops. These training ventures combine interpretation; information about how to conduct programs of casting, shooting, camping, boating, and other activities; clinics and instructional methods; use of equipment; and the preparation of material.
2. *Interpretation and Information.* The need for the development of outdoor education programs and the Project's plan of operation are interpreted to school administrators, teachers, and other interested groups through programs, exhibits, demonstrations at conventions,

and articles in educational journals. Many of these are done through the departmental structure of the National Education Association.

3. *Instructional Materials.* Needs for additional instructional materials are being determined and committees are at work preparing instructional guides and audio-visual aids.

The Outdoor Education Project, with its broad emphasis on a variety of activities, is stimulating much interest in the schools and colleges of the nation. It is believed that this is a sound venture because it stresses activities which can find their appropriate places in the curriculum and which contribute largely toward the accepted objectives of education.

Pilot Program of the Conservation Education Association

A long-range plan to codify, test, and make available a "model" program for state coordination of conservation education in the public schools has been developed by the Conservation Education Association and is now being tried out in the state of Washington. A preliminary step was the preparation of a theoretical plan assembled by a committee of Association members most familiar with existing problems and successful practices in a large number of the states. This dealt with teacher education, both in-service and pre-service, curricula materials, cooperation from agencies and resource people, the role of teacher-training institutions and state departments of education, the need for specialists at the state level, and similar concerns.

Next, an annual conference of the Association was devoted to testing the validity of the plan through analysis of the situation in selected states in comparison with the proposed model. Since the entire membership present participated in this process of evaluation and they represent trained personnel from almost every state, many refinements were achieved.

Finally, the state of Washington, supported with a small grant-in-aid, volunteered to field test the model plan by incorporating it with the existing program of conservation education in that state. It is the hope of the Association that this may start a process of sharing successful practices among many other states and will serve to implement chain reactions that will support and encourage existing programs and leadership.

American Camping Association

The American Camping Association is the professional organization representing all types of camping in the United States. It is concerned primarily with the expansion of camping opportunities and the improvement of camping practices. Many school outdoor education leaders are active in the American Camping Association, and the Association has established a national School Camping Committee to encourage school camp programs.

Through workshops and leadership training programs, the Association makes efforts to improve the leadership skills of camp leaders. In 1952 the Association conducted a national workshop on conservation in camp-

ing, from which there resulted a booklet, *Conservation in Camping*, which was published later by the Soil Conservation Service of the U.S. Department of Agriculture.

A grant of \$5,000 a year for three years was made by the Lilly Foundation to the American Camping Association early in 1957. This grant is to be used to develop and expand programs in conservation education in camps.

American Institute of Park Executives

The American Institute of Park Executives and Michigan State University are co-operating in the publication of five technical bulletins on outdoor education. These publications are designed primarily for park administrators and others interested in planning outdoor education programs. The following publications are being prepared:

1. *Outdoor Education, a Way to Better Community Living.* This is a discussion of need for outdoor education in nature interpretation programs, types of programs, methods and techniques.
2. *School-Park Cooperation in Outdoor Education.* This is a consideration of school-park cooperation as a means of improving the programs of both organizations.
3. *Interpretative Programs, A Guide to Better Park Use.* This is a manual presenting essential information for setting up and conducting interpretative outdoor education programs in parks, camps, and similar areas.
4. *Improving Community Living Through Outdoor Beautification and Horticultural Programs.* This publication is designed to stimulate interest in community programs centered around home and neighborhood improvement.
5. *Nature Trail Labels.* This is a compilation of some 900 labels actually used on existing nature trails.

National Conference on State Parks

The National Conference on State Parks has been concerned for a number of years with the expansion of interpretive services to state park visitors. These services are intended to develop an understanding and appreciation on the part of the visitor of the scientific, historic, and scenic features of the particular park visited. In some states the interpretive services have been used extensively by school groups.

The Committee on Interpretation of the National Conference on State Parks has prepared material for parks relative to the organization and conducting of interpretive programs. The Conference has participated for three years in the conducting of a workshop for park naturalists and others interested in interpretive programs. The workshop has been held in cooperation with Indiana University and the American Institute of Park Executives. It has brought together each year about sixty people actively concerned with park interpretation.



Teachers learn outdoor education skills in summer school camps.

CHAPTER IV

Teacher Preparation

1. EXPERIENCING REALITY IN THE EDUCATIONAL PROCESS

MODERN life and modern education which prepares for life are moving further and further away from the kinds of basic experiences that make a person understand and appreciate the world in which he lives. It used to be that a youngster, as he grew up, would learn much about the immediate environment by being physically present when significant things were happening. He helped prepare the soil in the spring to receive the seed. He watched the seed drop into the ground. He tended the plant . . . saw it grow into maturity. He came to appreciate its importance to his own life. In the autumn the harvest had a special significance to him. The fruits of labor, the gift of the soil, man's preparation for the winter, all had a personal meaning.

A generation or two ago, many families had an intimate relation with animals. A cow, a horse, a pig, chickens, ducks, geese were common appendages to the household. Growing youngsters knew these animals, their needs, their life cycles, and their contribution to man's economic system.

In those days, the words which students in school read in their books had roots in reality. They reached back into the experiences which the youngster had as he grew to maturity. Today this is all quite different.

Extensive mobility has made it possible for the family to extend itself geographically. The child of today probably sees more of the surface of the earth than his father or grandfather did, but the acquaintance is not one of depth. For knowledge about the roots of things—for insight with depth of meaning, he must rely upon symbols or images. Sometimes it is the written word, sometimes a picture. Now it may be the talking, moving picture on the screen. These devices extend the breadth of vision, but they may not deepen the understanding. Unless these devices are supplemented by firsthand experience in depth, learning may still be surface knowledge with little opportunity for combining knowledge into related wholes.

Lack of Teacher Preparation

Because the modern child, especially the city child, does not have the opportunity to experience the things he is expected to learn about in their natural setting, his education often is artificial and lacks depth of meaning. Since the family no longer provides these experiences, the school and the teacher must do so as best they can.

But the school is terribly handicapped when trying to carry out this new responsibility. To begin with, the school room, with its walls and windows, is designed to keep the natural world out. Secondly, the school must run on a schedule and schedules do not lend themselves to natural explorations. Thirdly, and most important, teachers are not prepared to bring real experiences to children. Indeed many teachers have grown to maturity themselves without close contact with reality in the areas in which they are expected to teach.

There is little or nothing in the certification laws and regulations that require a teacher to have firsthand knowledge of his subject. Courses and credits based largely upon symbolic answers suffice to meet most certification requirements. The teacher learns from a book which was written by someone who read other books. The actual contact with reality is, therefore, far, far removed.

Examinations for course marks and credits are usually entirely verbal. An ability to respond to a written examination, based upon word symbols, usually has little relationship to basic, firsthand knowledge. Except in science education, this is almost universally true. And even some science education is amazingly unrealistic and remote from reality. In short, the stock in trade which many teachers have is knowledge and not wisdom or understanding.

Those who have ever worked with teachers, or young people preparing to be teachers, in a natural environment will testify as to their naivete about some of the basic facts of life about which they are expected to teach. Teachers who have verbalized about a subject for years, when confronted with the real thing, will not recognize it.

One advocate of outdoor education had a group of teachers on a walk one day when they came upon a field covered with luxuriant, golden growth. He asked the group if they knew what it was. None of them did. Reaching through the fence, he picked several stems and asked them to look closely and see if they could recognize them. Each one took a stem and examined it.

"It looks like a feather", one said.

"Part of a whisk-broom", another judged.

Still none of them recognized it. So the leader showed them how to crush it in their hands, blow away the chaff, and leave the golden kernels.

"Seed!", one of them discovered. But none of them knew yet what it was.

"Eat it!", the leader suggested.

They hesitatingly took the kernels in their mouths and chewed.

"What does it taste like?", they were asked.

"Puffed wheat!", one of them finally discovered.

All of their lives they had depended upon this product. They ate it in some form each day. They probably had taught about it time after time.

They had shown movies about it, assigned it as a topic for reports. But they did not know what it was when they saw it.

Disturbing Facts

This illustration is no isolated sample. Several years ago the writer prepared a list of questions about certain basic experiences. This questionnaire, known as a Reality Inventory, was distributed among hundreds of young people preparing to be teachers. There was no final grade, no pressure to answer one way or the other. The respondents did not sign their names. It was just an attempt to learn how extensive the firsthand experience of the respondents was. Some of the results were most amazing.

In a country with a pioneer tradition and an expansive outdoors in which to seek experience, it was surprising to find that forty-three per cent of the women and twenty-eight per cent of the men said they had never slept out-of-doors in their lives. Eleven per cent of the women and eight per cent of the men answered "no" to the query of whether they had ever made a fire outdoors. In a world where millions of people are undernourished, eighty-two per cent of the women and seventy-four per cent of the men said they had never been without food for twenty-four hours or more except when they were ill.

One out of eight of the women and one out of three of the men had never cooked a complete meal for two or more people in their lives, while sixty-two per cent of the men and fifty per cent of the women had never preserved or helped preserve fruit. More than a third of the men and nearly two thirds of the women said they had never walked ten miles or more at one time in their lives.

A Challenge to Teacher-Education Institutions

Can real depth of understanding and inspired teaching come from such backgrounds? This is a question that should be pondered carefully by those who prepare teachers. It may well be that a certain pattern of firsthand experience is just as important to the good teacher as a pattern of course credits.

To overcome this growing lack in our educational program, it is necessary to do two things. First, young people who are going into teaching as a profession should be given firsthand experiences about the things they expect to teach. Every program of teacher education should be carefully examined to see if the experience background of the candidates demands a systematic exposure to certain of the basic elements of the world in which they live.

Secondly, those who expect to be teachers should be introduced to the outdoors in such a way that they can and will provide experiences for the youngsters they will have under their care. Again, those who have worked with young teachers or those who are going to be teachers will testify that, once they have been introduced to outdoor education, they are likely to plan these kinds of experiences for the children they teach.

In addition to the teacher-education side of the problem, each community should consider the feasibility of providing facilities and resources that will make it possible for those teachers who wish to use the outdoors to do so without too much difficulty. Firsthand experience is important to modern education. It takes energy and ingenuity to provide these experiences. The average teacher will not do the job unless there is administrative and public support for her efforts.

2. PRE-SERVICE PREPARATION

THE past decade has witnessed many new developments in teacher preparation for outdoor education. While it has been said by some that there is a lag between new programs and leadership training, this would not appear to be true concerning outdoor education. The following descriptions of pre-service and inservice preparation are only a few of many that could be reported throughout the United States. Those herein described have been chosen because they are representative geographically and include various sizes and types of colleges and universities. A number of others could be cited if time and space had permitted.

A State Program of Outdoor Education for Teachers

The New Jersey State School of Conservation, which has been in operation since the summer of 1949, is dedicated to: (1) providing educational experiences for students and teachers which will increase their appreciation for the importance of conservation in America today; (2) the training of future teachers and teachers in service in the use of the out-of-doors for educational purposes; and (3) conducting a demonstration children's camp utilizing conservation education as the main program feature.

The State School of Conservation was an idea in 1948. In 1949 it was launched in a modest way. During the season of 1956, it offered an extensive program which reached both adults and children.

The success of the New Jersey State School of Conservation can be attributed to a number of things, but certainly the excellent cooperation that has existed between the State Department of Education and the State Department of Conservation and Economic Development is a large factor. The Department of Conservation and Economic Development has been responsible for providing facilities and co-operating with the program, and the State Department of Education has developed and directed the program through the state teachers colleges.

Existing Camp Facilities Used

The facilities of the camp grew out of a Civilian Conservation Corps camp which was active in the late 1930s. The young men in this CCC camp, among other things, constructed some excellent facilities in the New Jersey Stokes State Forest. These facilities were designed for use as a summer camp by organizations desiring to rent them from the state.

The camp buildings constructed under this program were excellently designed. They consisted of a combination of native stone and timber construction and included a dining hall, an administration building, a recreation hall, an infirmary, a staff lodge, fourteen living cabins, and latrine and washroom facilities.

At the time the CCC program was terminated in the late '30s, the camp buildings were not quite completed; but they had progressed to a point where they were usable. The camp was used for a year or two by a council of social agencies in northern New Jersey and then lay idle for several years before the idea of a state school of conservation took shape.

Finances

When the plan to develop a state school of conservation was first proposed to the state legislature, it was based upon the assumption that the program would be almost entirely self-supporting. That is to say, that those who participated would, upon the payment of room, board, and tuition, provide the finances necessary to carry on the operation. The State of New Jersey, however, was to assume responsibility through the Department of Conservation and Economic Development for maintaining the physical facilities.

In order to organize and develop the program and launch it in the summer of 1949, the legislature appropriated \$6,000. The Commissioner of Education requested that the New Jersey State Teachers College at Montclair assume responsibility for the administration of the camp, and the dean of the college was designated as the director. In this way, the New Jersey School of Conservation became a part of the part-time and extension division of the college and, as such, was empowered to offer courses for college credit under the administration of the college.

The Program

During the first summer, the program at the School of Conservation consisted of two undergraduate institutes in outdoor education and a series of graduate courses in conservation education, rural sociology, and field biology. After the first season's operation, it became evident that it would be advisable to establish a demonstration children's camp at the School of Conservation to serve two functions: (1) to provide demonstration opportunities in conservation education; and (2) to supplement the income and place the operation on a self-supporting basis. The children's camp was announced through the public schools and was an immediate success. Leadership for the camp was recruited from the faculties and students of the state teachers colleges, thereby providing experiences with children to the future teachers as well as supplying an excellent level of leadership for the camp.

The matter of recruiting participants for the graduate courses at the School of Conservation for teachers in service has never been easy due to summer commitments which provide income and the leisure to work toward graduate degrees. It has been difficult to fill the courses offered,

especially in the middle of the summer. There has been a tendency, therefore, for the graduate courses to be offered immediately after school closes in the spring or just before school opens in the fall, with the summer program for children occupying the middle part of the summer. However, as teachers in conservation came to the School of Conservation and had experiences in the out-of-doors, requests began to come in for the use of the facilities for the school year by groups of school children. This has been encouraged up to the point where such groups could be accommodated with the existing staff and facilities.

Extending the Program

It has been the policy of the school of Conservation to encourage outdoor education in communities in the state, but not to assume full responsibility once a program was established and moving under its own power. The most successful community operation has been in Ridgewood, New Jersey, where the community has now established its own outdoor education program with professional leadership after having used the facilities of the School of Conservation for a number of years. Because of the program of the School of Conservation, a number of additional communities began experimenting with outdoor education as a regular part of the curriculum.

The value of outdoor experiences became apparent to all those participating in the program. It soon became evident that the extension of these experiences to all students in teacher education would be a wise move. The first move in this direction was to require all majors in science education at the Montclair State Teachers College to complete a course in field biology at the School of Conservation. Panzer College of Physical Education has required two ten-day periods of camping experience of all its undergraduates and has utilized the School of Conservation since the school opened in the summer of 1949.

As the number of students from the state teachers colleges who participated in the School of Conservation program grew, it became increasingly evident that this was the kind of experience that all students should have, especially those who grow up in a metropolitan area. The presidents of the six state teachers colleges have consistently supported this program in a variety of ways. Within the last year, this group has officially endorsed, in principle, the idea that outdoor education experience should be provided for every student in the teachers colleges as a regular part of the curriculum as soon as this is practical from the standpoint of facilities and staff.

Plans for extension of the outdoor education program among all the state teachers colleges have been drawn and it is hoped that further moves in this direction can be made in the coming months to the extent that resources will be available to provide these valuable experiences to all students in teacher education.

*Inter-disciplinary Approach for Preparing Teachers
and Leaders in Outdoor Education*

University of California, Los Angeles

"Outdoor education" through general usage has grown to mean school camping in some educational circles. The major emphasis and activity directed toward this aspect of education has centered primarily at the elementary level. This occasions the concern that outdoor education may signify only elementary school camping to many educators. Actually, in its broadest context, it means far more than this. It refers to education in the out-of-doors at all age levels. It is broader than the specific skills involved in such outdoor activities as hunting, fishing, camping, hiking, star-gazing, rock collecting, bird-watching, skin-diving, canoeing, and boating. Actually, it is that phase of education which seeks to improve man's use of his physical environment for such activities. It implies first-hand contact with the out-of-doors and a study of the relationships of plants and animals to each other and to their environment, and the relationship of all these to man. It stresses the acquisition of knowledge and the development of understanding about the out-of-doors, based upon broad concepts and general principles rather than detailed facts. It presumes actual experiences in the out-of-doors in order that attitudes and appreciations can be developed that will result in improved behavior in terms of more intelligent use of the out-of-doors.

Outdoor education is not a new subject matter area. Rather, it is an interpretation of many subject matter areas through the use of the out-of-doors. In this sense it becomes a method of teaching—utilizing the out-of-doors as a laboratory for the purpose of interrelating a number of subjects which have been taught previously as separate unrelated courses or with minimum stress upon their interrelationships.

What the individual can learn about his physical environment will depend upon his age and previous experience. The nature of the outdoor education program should be adapted to the age level at which it is aimed. Outdoor education occurring at the secondary-school level should differ from that which occurs at the elementary-school level not only in terms of depth and scope of the subject matter covered at various age levels, but also in the manner by which it is interrelated.

In the early stages, organized camps and youth-serving and conservation agencies assumed responsibility for providing an environment for outdoor education. More recently, elementary schools, in an effort to supplement and enrich the regular school curriculum, have embraced camping. The common elements of these programs provide the basis for the development of a program of professional preparation of leadership for outdoor education. These common elements are: (1) science education, (2) conservation education, (3) social relationships, (4) recreation skills, (5) spiritual values, (6) personal health, and (7) democratic planning and participation.

Goals of Outdoor Education. Through urbanization, man has lost contact with his natural environment. Technology has led to an accelerated depletion of natural resources, while at the same time increasing the amount of man's leisure. Society is more dependent today upon the physical environment than ever before. Economically, society needs scientific experts in such areas as the conservation of soil, water, mineral, and other natural resources. Politically, society needs a citizenry well enough informed to support programs of conservation of these vital resources.

The development of common understandings and interests through outdoor education is one means of achieving these goals. The initial experience should be provided at the elementary-school level. However, outdoor education should not stop there. It is a lifelong process of such vital concern that it cannot be delegated to a single institution or agency in society. Today, such agencies as the National Park Service, the United States Forest Service, the Department of Agriculture (extension services through 4-H clubs, farm organizations, *etc.*), the Fish and Wildlife Service, various state agencies concerned with conservation, as well as schools and organized camps stress the importance of and conduct programs of outdoor education for all age levels.

As is often the case, the leaders now in the field are pioneers. They have blazed the trail, so to speak, before professional education has really organized to prepare leaders for outdoor education. School districts currently require the regular teaching credential of those persons conducting outdoor education programs. The credential categories include the school camp teacher-counselor, the school camp administrator, the outdoor education supervisor, and the conservation supervisor. In some instances, the science and art supervisors are pressed into service. Federal, state, and county agencies other than schools do not require the credentials although leaders in these agencies have functions similar to those of school personnel. In this group are conservation educators, consultants and co-ordinators of outdoor education, and ranger park naturalists. In the field of organized camping, private camps and youth-serving agencies with camping programs employ personnel in similar capacities.

Desired Leadership Competencies. The services rendered by these leaders have assumed several specialized forms. For example, many outdoor educators have direct teaching relationship with participants of various age levels. Others may be responsible for administrative and organizational functions with particular emphasis upon the promotion, planning, and coordination of programs. Some specialists work with participants as individuals, others work with people in groups. However, through all of these run the common threads of: (1) the ability to understand science and its interrelationships, and (2) the ability to present these concepts to other people. In essence, the ideal outdoor educator possesses a broad scientific background with a firm grasp of the meaning and significance of this background in relationship to his physical en-

vironment; he possesses the ability to communicate this in socially significant terms to others.

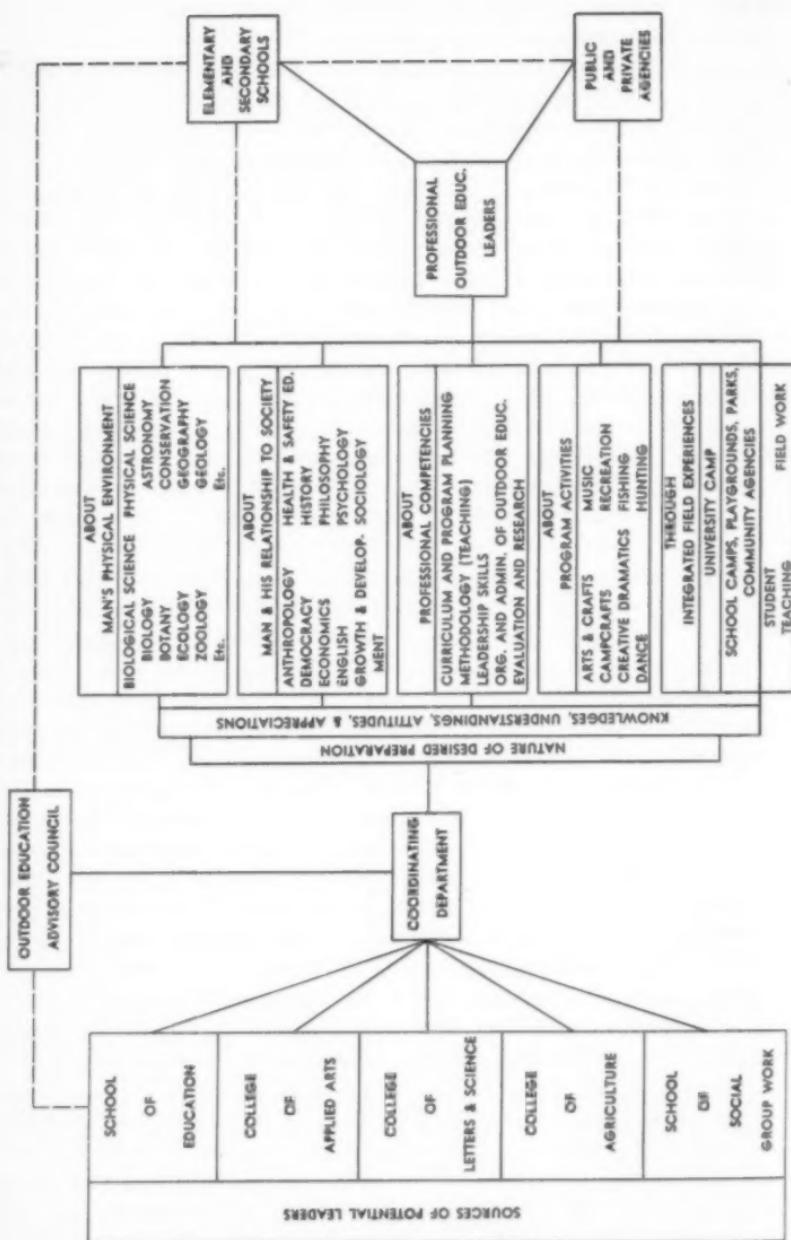
In only a few isolated situations has academic education been organized to provide this level of professional preparation. The majority of leaders now in the field have had to supplement their backgrounds through experience and in-service education. In this sense, they have pioneered not only today's program, but also the general framework for the preparation of tomorrow's leadership. It is from the results of their experimental approaches to the design of outdoor education programs that teacher-education institution should determine the nature of the desired preparation. At the present time, it appears that this preparation should provide the potential outdoor educator with an understanding of his physical environment, himself, and his relationship to society. In addition, he should have opportunity to: (1) develop understandings, knowledges, and skills related to working with people in the teaching situation, (2) develop skills in the program activities normally found in the outdoor education environment, and (3) integrate all of these through intensive field-work experiences. The section of the diagram appearing on page 118, labeled "Nature of the Desired Preparation", is an effort to depict the various areas which can and should contribute to the preparation of outdoor educators and may be more descriptive than written treatment of this aspect.

The Inter-disciplinary Approach—As the diagram suggests, this professional preparation cannot be provided within a single department or college in an educational institution. The institutional pattern of preparation should reflect the same flexibility and creativity as the experimental approach employed in the field. The university setting appears to lend itself particularly well to this concept. The university, composed of separate schools and colleges such as agriculture, education, letters and science, applied arts, social group work, and augmented by rich resources in staff, students, physical facilities, (laboratories, libraries, etc.), research programs, and experimental programs, is equipped to provide the preparation outlined above.

There are several ways in which this preparation can be approached at the university level. However, one method which affords several advantages and appears conducive to "best" preparation is called the "inter-disciplinary approach."

In brief, the inter-disciplinary approach is an attempt to utilize those resources of the total university which can contribute to the preparation desired. The term implies the coordination of the offerings of many disciplines and departments through a single department vested with administrative responsibilities and assuming the role of "coordinating department." Some of the disciplines and departments that can contribute to the program are: botany, biology, zoology, astronomy, geology, anthropology, psychology, education, physical education, recreation,

THE PROFESSIONAL PREPARATION OF OUTDOOR EDUCATION LEADERS
AN INTER-DISCIPLINARY APPROACH AT THE UNIVERSITY LEVEL



Nature of the desired preparation.

sociology, art, music, and theater arts. Several of the advantages which this approach affords are: (1) duplication of courses, staff, and facilities is avoided; (2) students in the program are exposed to the professional ideas, perspectives, and knowledges of specialists in these disciplines; (3) students can enter the program from many areas; (4) concern for the program is shared by many participating departments; (5) students have opportunity to explore a wide range of offerings; and (6) preparation can be creative by matching the program to the individual's needs, interests, and goals.

The Advisory Council. The preceding diagram illustrates how the resources of a university could be organized for the inter-disciplinary approach. Interested students in the several schools and colleges of the university participate in the preparation program through the coordinating department. An advisory council, composed of representatives from those departments directly concerned with the preparation of outdoor education leaders, resource representatives from other departments, and lay professionals from community agencies operating outdoor education programs, serves to guide and implement the inter-disciplinary approach. Some of the functions of this council are: (1) to serve in an advisory capacity in the planning and guiding of the program of professional preparation of outdoor education leadership; (2) to inform departments, schools, and colleges in the university of trends, needs, plans, and developments in the field of outdoor education as they emerge; (3) to serve as a medium for stimulating departments to analyze and evaluate their courses and experiences as resources for students in outdoor education; (4) to render advisory service relative to outdoor education to interested school districts, educational agencies, organizations, workshops, and the like; and (5) to interpret the concepts and purposes of the outdoor education program and the functions of the council to the university and the community.

As examples, two items which the advisory council might consider in fulfilling these functions are: (1) Should the university operate a camp?; and (2) How can the university help integrate the outdoor education point of view in existing state and local courses of study?

Important Considerations. The responsibility for planning and developing the over-all program and the organization and leadership of the advisory council is delegated to a "coordinating department" by the university administration. It should be apparent from the foregoing discussion and the diagram that any of several departments could assume the role of coordinator. Traditionally, camping has been taught in departments of physical education or recreation. Because of the close relationship of camping to outdoor education, there is some rationale for centering such education in physical education or recreation departments. Due to credential requirements and the emphasis on school camping, the school of education might be the logical coordinating unit. However, because of the importance of science and conservation, one of the biologi-

cal science departments might be so designated. Each educational institution should decide for itself where responsibility for the coordination of the outdoor education program best belongs. This decision should be based upon the local situation and should ensure that the full resources of the institution are utilized.

The nature of the desired preparation was previously identified by means of the diagram in terms of five general areas essential to the preparation of outdoor education leaders. A student would not take all of the subject areas courses indicated. Rather, he would supplement his existing background and experience with knowledges, appreciations, attitudes, and understandings in the five general areas in the light of his professional goals. The nature of the desired preparation has consciously been expanded to emphasize the breadth and scope of university offerings. Although compartmentalized in the diagram, this is done for graphic purposes and the dotted line indicates how these areas are co-related to the total program through the advisory council.

Full use should be made of community resources in the preparation program. This is made possible through such avenues as membership on the advisory council, utilization of professionals from the field as instructors and lecturers, and use of operating programs for supervised field-work experiences.

For the potential outdoor education leader who envisions a career in the schools, opportunity should be provided for meeting the proper credential requirements. To those students seeking leadership opportunities in outdoor education in other public and private agencies, an avenue should be provided leading to the non-credential positions of park naturalists, consultant in outdoor education, camp administrator, etc. Certain elements of teacher education are necessary for all outdoor education leaders. The delineation made in the chart merely indicates that, in terms of employment, it may be necessary to meet specific requirements for the credential and that specialized courses may be necessary. Since employment patterns are not clearly defined, the program of professional preparation should be flexible and opportunity should exist to adapt the institutional pattern to the emerging demands and needs of the field.

The approach presented is one which is being experimented with in several institutions throughout the country. Additional institutions may see fit further to implement or explore this method and to experiment with modifications and adaptations of the concept of an inter-disciplinary approach at the university level. Certainly the goals and objectives of outdoor education merit the concern and best efforts of all education.

Michigan State University

While all elementary and many secondary-school teachers should be able to teach in the out-of-doors, there is a need for some to have more intensive preparation for positions of leadership in outdoor education in schools and colleges. Based on the thesis that outdoor education is neither

a subject matter field nor a separate discipline, but is a way of teaching and a climate for learning, all appropriate departments, divisions, and schools in a college or university should be involved in setting up a curriculum for outdoor education.

The essentials in a program for leadership in outdoor education should include an understanding of human growth and development and the learning process, the ability to interpret the outdoors as a learning laboratory, techniques and understandings needed in teaching in an informal outdoor setting, and skills and appreciations for enjoying the outdoors. The courses and experiences needed to achieve these competencies would involve education, the physical and social sciences, conservation, sociology, social work, *etc.* Consequently, at the graduate level, especially, it would be necessary to tailor the offerings in outdoor education in accordance with the training and experience of the individual.

An example of this approach will be found at Michigan State University where outdoor education is considered an area of emphasis. The course work and activities related to outdoor education are interwoven into the candidate's major field. For example, a student with an undergraduate background of science would need more of his graduate experiences in education, such as educational psychology, child growth and development, and physical education. Similarly, a student majoring in the field of physical education would require more work in science, conservation, and general education courses. All would need field experiences in camps and other outdoor settings. A few special courses combining an interpretation of the outdoors, teaching techniques, and patterns of outdoor education should be provided, preferably through courses of a workshop nature. Such is the case at Michigan State University College of Education where off-campus courses in outdoor education and a three-week summer workshop are conducted for pre-service and in-service preparation of teachers and leaders.

The inter-disciplinary pattern for outdoor education, therefore, implies that all the appropriate offerings on a campus should be included in planning a series of experiences that will help all teachers and others interested to make the best use of the outdoors for learning. Wherever possible, existing courses in the various disciplines can be adapted to meet the growing trend for teacher preparation for outdoor education. A minimum number of new courses should be added, as needed, by the appropriate departments. A campus committee, made up of representatives of all divisions and departments involved, should be designated to plan the offerings in outdoor education. Camps and other outdoor settings should be used for field experiences, internships, and student teaching.

One of the best plans for student teaching is the use of selected communities where students live and teach for a term or semester. The centers selected have school camping and other types of outdoor programs so that prospective teachers may have an opportunity to participate in

classroom related outdoor experiences in a broad educational curriculum. Such is the situation at Michigan State University where several of the student-teacher centers have school camping, school forests, and gardening programs in the curriculum.

This approach to teacher and leadership preparation is consistent with the broad interpretation of outdoor education described in this book and is the best assurance that the outdoors will have maximum use in providing better educational experiences for children and youth.

Internships in Outdoor Education

Antioch College

In Ohio, a short distance from the urban centers of Fairborn, Xenia, Springfield, and Dayton, on virtually an island of natural wooded land, the Antioch College Outdoor Education Center has just started a much-needed and rapidly expanding program. The first two objectives of the program are concerned with: (1) demonstrating land-use management in the development of a natural area for outdoor education, and (2) providing school camping experiences for elementary school children within a sixty-mile radius of the camp. The third objective, and most relevant to this article, is to provide, using the Outdoor Education Center as headquarters, for leadership training and experience in outdoor education for: (1) college students majoring in elementary education and natural science; (2) in-service school personnel; and (3) pre-and in-service personnel of private and public programs concerned with camping and the out-of-doors.

Administrators are becoming more interested in knowing that the personnel they employ as teachers of the fifth and sixth grades, teachers of science, and instructors in the natural sciences at the college level have experience and training in using the out-of-doors as an enhancement to learning. The utilization of internships for the undergraduate or graduate student, and workshops, seminars, conventions, *etc.* for the in-service personnel should be forth-coming.

Among the finer education opportunities which exist in the program of the new Center at Antioch are the two or three internships offered to graduates or undergraduates who can arrange to receive credit for a form of apprentice education. Many training institutions already make these arrangements for their practice-teaching experiences. Outdoor education internships need to be utilized in a similar fashion, both for elementary education majors and majors in the natural sciences. The Antioch College Center is only a newcomer among the many programs about the country that are qualified and interested in offering such "learning by doing" experiences for qualified students.

Antioch students interested in internships in outdoor education, in addition to their opportunities on the campus, can work with: (1) school camping in California, Michigan, New York, New Hampshire, or Ohio; (2) the nature-counselor phase of private and public summer and day

camps; (3) children's and natural-history museums; (4) governmental agencies such as the United States Departments of Agriculture, Interior, and Natural Resources, and the United States Geological Survey in a variety of jobs; (5) the Marine Biological Laboratories in California or Massachusetts; (6) an observatory staff; or (7) the National Parks.

While some of these internships can be arranged only through a work-study plan such as Antioch maintains, those in school camps about the country would be, and have been, particularly ideal for other colleges or universities. The realization that leadership training for outdoor education, like outdoor education itself, is best accomplished "in the field" with all the motivation and gratification of spontaneity and non-simulated problem solving, needs applause and action-support in addition to lip service.

Springfield College

Eligibility for an internship at Springfield College is initially earned by successfully completing instruction in the following courses, or being able to evidence the equivalence of such experience: (1) introduction to camp leadership, conservation, physical science; (2) introductory courses in arts and crafts, music, dramatics, first aid; (3) primary skills and techniques in games and sports for playground, gymnasium, field, and court; boating and canoeing; swimming, diving, and lifesaving; and (4) fundamentals in rhythms, folk and square dances. It should be understood that these courses are not considered to be ends unto themselves. Rather, their value exists to serve as sources. Also, the content, when selected, should be determined on the basis of functional use in camp settings for children.

Active trainee participation attempts to develop a recognition and an acceptance of four personal-development goals: (1) exposure; (2) experience; (3) experimentation; and (4) evaluation. Students who earn eligibility for outdoor education and school camping are usually quick to see these relationships. Thus these goals become not only the curriculum design, but also the goals of each student when he or she enrolls for the ten-week internship with some school camp. Some students, however, prefer to attend special visitations to local school systems for a week or more at a time, such as Newton, Massachusetts, or the Boston University Sargent Camp in New Hampshire, or the newly established outdoor education program at Ridgewood, New Jersey. However, over the years since 1946, Springfield College students have served in school camping block placements in the states of California, Michigan, Texas, New Jersey, New Hampshire, and Massachusetts.

A three-way problem exists and must be solved by all three personalities working hand in hand—the trainee, the college adviser, and the school camp director-supervisor. When a placement is located, involvement is reduced to two basic parts.

Part One includes the matter of relating the trainee first to the selection of and the necessary arrangements for a block placement with a qualified

school camp or outdoor education director. Second, the process calls for a written job description of the responsibilities of the trainee by the school camp director. It is deemed important that all three parties concerned be involved with the changes, or acceptance and final approval of such a statement. A third step calls for what Dr. Jay B. Nash used to identify as "teachable moments." These are the many personal matters which must be accomplished by the trainee. In short, these include budgeting of finances, food, housing, travel, college registration, and so forth. Extreme care should be taken by the college adviser at this juncture to assure that a block placement does not become a financially remunerative experience, but rather an educational experience for which "expenses," at best, may be received by the trainee. Also, selection would assume that the director-supervisor would not misuse or make money on trainees. Expenses at best, then, is the neutral goal for all concerned. A fourth step for the college adviser also becomes the first step for awareness of and supervision by the school camp director.

This fourth and transition step involves trainees' records and reports. Here, however, the trainee must initiate full responsibility to develop some system of a daily log or diary of exposures, experiences, and experiments, all of which must be later evaluated. To assist with this process and to help the trainee to keep on target, a weekly report letter is sent by the trainee to the college adviser, and a copy is provided the school camp director. At half time (5 weeks), a progress report letter is prepared. A summary of reports to date, guided by the original job description and by the four goals identified above, is expected. This permits opportunity for the trainee to identify those things which have been left undone, as well as to give perspective and priority to those things that should be attempted during the last half of the block placement period. Lastly, a final report is completed which should have the benefit of consultation by the trainee with the school camp director and with the college adviser.

Part Two delineates the reality of the school camp setting. The school camp setting, as expected and planned in the job description mentioned above, should provide for *at least* the following opportunities:

First, the trainee is to be directly *exposed* to the realities of responsibilities with children away from home. The trainee shall be assigned to live in a camp shelter with a group of children and will be held responsible for their health and safety as well as for their growth and development. The trainee should expect to eat at the same table with the children. He will want to play and learn with the children. To accomplish such exposure, the trainee will serve under the school camp director and will assist either the home-room teacher or another specialist on the staff, or will lead a variety of groups or classes in activity that has been previously planned by the home-room teacher, the school camp director, and/or the children. In short, the trainee serves in multiple roles as counselor, leader, teacher, friend, adviser, and enabler.

Second, the trainee should gain *experience* with some of the basic demands often made upon teacher-leaders. Thus the trainee's observations will include many individuals motivated by curiosity and interest, or fear and insecurity, in a myriad of things in the out-of-doors school-camp setting. In addition, numerous social and political facets of group life will seek dominance. Experience reveals that human problems will prevail, and lessons in the need for human independence, dependence, and interdependence will most likely abound in such settings, often testing a "Solomon." The influence of attitudes and the impact of behavioral practices are normal and natural to such basic learnings in a camp setting. Scheduled and unscheduled knowledge areas and needs often loom large in these dynamic settings. Adaptability and the invaluable skills and techniques mastered back at college will now show up in dramatic and sometimes embarrassing moments. These essential experiences are "grist for the mill" in one's internship.

A third opportunity should provide for trainee *experimentation* with the solving of problems under the expert eye and the guiding spirit of the qualified school camp director.

The fourth opportunity essential to the school camp internship is to expect, as well as to understand, the demands of, and the need for *evaluations*. With these each trainee must wrestle.

Trainees who have proved successful to themselves and to others have taught the writer that the Springfield College internship demands at least three objectives. Trainees are to: (1) earn eligibility for an internship; (2) strive for the goals of *exposure* to many ideas and persons in a successful school camp setting under top caliber leadership; to seek multiple *experiences* with children and teachers as individuals and in small group settings; to *experiment* whenever and wherever possible but always under clinical guidance of a supervisor; and to *evaluate*, always in a search for meaning and value of activity performed by humans; and (3) seek and develop self-imposed disciplines that are concerned with attitudes, concepts, knowledges and skills—these appear to lead to competence.

State University of New York Teachers College, Cortland

All students majoring in the four-year undergraduate professional training curriculum in recreation education are required to complete satisfactorily a full semester of field-work experience off campus for which they get a total of sixteen semester hours credit. This field work requirement consists of two different kinds of experiences at two different places for a minimum period of eight weeks each. All students are assigned one eight-week period serving in a public recreation program within the state of New York. The student, subject to final approval by the recreation education department of the college, may choose the area of field work in which he wishes to engage for the other eight-week period. Elective areas include school camping, youth-serving agencies, industrial recreation, and hospital recreation. Each year since 1952, from four to

six juniors in recreation education at Cortland have chosen to do a part of their field work in school camping. The school camps training them include Clear Lake Camp in Michigan; Camp Cuyamaca in San Diego, California; Norwalk, California, School Camps; and Boston University Sargent Camp in Peterborough, New Hampshire.

Field Experience in School Camping

An effective teacher leads from courage rather than from fear. She is guided largely by the purposes of children rather than from those of adults. She "plays it by ear" and leads toward the child-centered goal rather than from the stereotypes of her society. Where, in our American culture, can she gain this courage to perform effectively? Certainly not from reading books and listening to lectures, or from practicing in the classroom, controlled as it is, by cultural stereotypes and cliches as well as by adult-planned courses of study. In fact, our highly organized society presents few opportunities whereby a student teacher can get experience with a group of children in a "free" situation. The school camp can provide this opportunity and is gaining in favor as a training locale for teachers and other group leaders. To a lesser degree, school farms and social-recreational programs provide similar conditions.

The essential elements which make leadership training in the school camp different from the classroom are:

- (1) It is a 24-hour, round-the-clock type of experience.
- (2) Children are away from home and away from school and usually check their inhibitions before arrival.
- (3) The genuine workshop method can be employed.
- (4) All learning situations are complete. Choosing a project, setting purposes, planning to carry them out, organizing committees, carrying out the project, and evaluation makes a complete learning experience. In one week at camp, twelve complete learning situations can occur whereas in the average classroom not that many units are completed in a year's time. Evaluation can be in terms of "how well did we do with our plans" rather than "how much content did we learn." Leaders can see the relationship between planning and the results, a function rather obscure in most schoolrooms.
- (5) The false assumption that the teacher must know the content and the answers before she can be an effective teacher can be disproved in camp. Through actual practice, teachers can get an inner feeling for the fine art of instruction *vs.* entertainment—of placing a question back to the inquirer for his own research.
- (6) Most camp activities are functional. This makes it a practical laboratory to experiment with various approaches to teaching—teacher-imposed plans *vs.* teacher-camper plans. Busy work, as such, is obnoxious.

- (7) The camp program gives a teacher a sense of that undefined line where at one time she operates completely at the child's level and at another she becomes the status person. Most classrooms require the teacher to maintain her status at all times.
- (8) In camp, the leader can learn from mistakes since bad practice is not as costly as in the classroom.

Battle Creek (Clear Lake) Public School Camp

The importance of camp experience in training teachers and group leaders has long been known by Michigan colleges of education. Recently, however, it has become an optional requisite in the larger institutions with staff personnel appointed to coordinate the effort.

The Clear Lake Camp experiment in teacher training began in September 1952 with several state-supported institutions participating. A year later, the faculty of Western Michigan College made it possible for juniors to spend a week at camp. In late 1954, the School of Education of Michigan State University opened a student-teacher center in Battle Creek. One of the requirements of the program compelled each participant to spend a week working in the school camp program. During the summer of 1956, a two-week experience at Clear Lake Camp was made a requirement for credit in student teaching. This current year, approximately 130 students from Michigan State University will have experience at Clear Lake Camp as a partial requirement of their student-teaching program.

The program is still emerging and will no doubt take on many new forms in the future. Some of the criteria which seem to guide the effort at present are:

- (1) That students should come to camp for the sole purpose of seeing and learning about "kids." The camp cannot take them as a form of inexpensive labor.
- (2) The camp director and staff must be competent teachers and have the skills to help student teachers find "better ways."
- (3) Students should have staff status and should arrive in camp several hours ahead of the children.
- (4) The camp director and staff should hold several discussion-conferences with students during the week for the purpose of identifying problems of leadership and interpreting clues of strategy.
- (5) The camp director should hold a final evaluation conference with each student on "how does he feel" about his relations with children? with his peers? with teaching in general? What kinds of children does he like best? What leadership problems gave him the greatest trouble?

Of all the student teachers in training who have participated in the Clear Lake Camp experiment, two out of three had never had a prior

experience with a group of children. Couple this with the fact that their only experience before graduation will come in a formal classroom, a place often devoid of any child-centeredness, it becomes obvious why Michigan State University and other Michigan teachers colleges have put a high priority on camp experience for their student teachers. This is especially true of secondary teachers who often go directly into a subject-centered classroom without ever having had a child-centered experience. There is substantial evidence that a camp experience will give a teacher the courage to be an effective leader.

Northern Illinois State College

A unique program in teacher education is in effect at Northern Illinois State College at DeKalb. All students majoring in elementary education are involved in three successive outdoor-education experiences at the Lorado Taft Field Campus in Oregon, Illinois. Because of the education department's block setup in which students meet with one instructor for a block of time varying from two to four hours a day, it is possible for students to spend considerable time in class planning and preparing for the field experience in outdoor education.

The first of these experiences takes place during the sophomore block when students spend a two-and-one-half-day period at the field campus exploring the concept of the out-of-doors as a laboratory for learning. This initial exposure of outdoor education is an attempt to develop an awareness to the out-of-doors as an extension of the classroom. The primary focus is upon analyzing the nature of the learning process by having students examine closely their own reactions as learners when confronted with new learning situations.

During the junior year, students are involved at the Field Campus for three days. This time, the emphasis is upon investigating various subject matter areas of the elementary curriculum and searching for ways of enriching and supplementing these content areas by means of firsthand observations and direct experiences. The culminating experience in outdoor education occurs when seniors return to spend a full week of school camping, living with and teaching a class of elementary pupils.

Prior to the actual week of school camping, seniors spend time setting up their own objectives, familiarizing themselves with the school-camp routine, and preparing for the learning activities which they will be called upon to teach. In most cases this professional preparation by college students also includes periodic visits to the sixth-grade classroom with which they will be working. During these visits, college students assist the children in planning for the kinds of activities which they want to carry out, and help direct the pupils' thinking in terms of establishing purposes for these learning activities.

During the week of school camping, in addition to teaching children in the out-of-doors, college students also assume responsibility for supervising children in the dining hall, teaching a singing grace, supervising

the rest period, supervising the camp store, putting children to bed, and song leading. College students also take an active role in helping children evaluate daily the kinds of learning which are taking place. They very often keep anecdotal records and do sociometric studies which will increase their own understanding of children. In most cases, the college students pay a visit to the sixth-grade class upon their return to school in order to see the kinds of follow-up activities which have resulted from the week of school camping.

By the time a student majoring in elementary education is graduated, he has been exposed to three successive and related experiences in outdoor education at the Field Campus. It is believed that these students will be more effective teachers for having the knowledges and skills which will enable them to take their own pupils into the larger classroom of the out-of-doors and use it as an effective teaching medium.

Southern Illinois University

For the past seven years, Southern Illinois University has included outdoor education as an integral part of its higher education program. Subscribing to the educational principle that people learn by doing and that information when actually experienced is more meaningful and the individual will retain it longer, the Recreation and Outdoor Education Department, in cooperation with the teacher education program of the College of Education, provides many opportunities for students to "learn while living" out-of-doors.

There are three main avenues through which experiences may be gained in outdoor education. The University School offers prospective teachers an opportunity to observe and participate in a five-day school camping program for eighth-grade children. The local public schools and other elementary schools from neighboring communities participate annually in school camping. The University Camp, operated by the Recreation and Outdoor Education Department, also includes training in outdoor education for those interested during the summer months.

Up to this time, the University School and the public schools were either using Giant City State Park (12 miles from Carbondale) or the University Camp (located on Grassy Lake ten miles from the main campus). Now all schools in Southern Illinois (southern 31 counties) interested in school camping can utilize a central area (eventually 1400 acres) set aside by the Educational Council of 100 for Outdoor Education.

The University School's camping program is held during the last part of May, but the planning for curriculum and the mechanics for administering such a school camp are started early in the year. Many meetings are held for coordinating all the various subject areas, and all the teachers, staff members, and resource personnel are brought together to review and evaluate the previous year's camping program.

There are many reasons why this program is thoroughly planned in advance, but one particularly important reason is that the curriculum

within the school must be planned and timed in such a way as to include school camping in a logical sequence—thus, the students are ready for what is coming and the experience is much more meaningful to them! Another important factor is that the prospective teachers doing practice teaching have an opportunity to see the entire curriculum progression and the relationship between theory and practice—to put it another way, to see those things which can be best taught in the classroom and to see how those things are taught which can be best taught in the out-of-doors.

Each summer the Recreation and Outdoor Education Department offers courses for credit at the University Camp. Last year, there were 125 undergraduate and graduate students (coed) registered for four to twelve units of credit during the eight-week camping season. This year, there are eleven different departments offering courses appropriate in the out-of-doors. Among the various courses offered are several that provide desirable field experience in outdoor education. Students may register for four quarter units of practice teaching, four quarter units in school camping and outdoor education programs, four quarter units in geographic bases of outdoor education, and two to eight quarter units in a graduate workshop in outdoor education.

Students from any department within the University are welcome to visit and observe the outdoor education program in action—in fact, during the actual camping period (whether it is in spring or summer), many students, freshmen to seniors, and teachers from area schools take the opportunity to see this "doing" program. However, the ones who receive the greatest benefits are those who live, work, play, and learn with the campers. Prospective teachers and future recreation leaders discover that these school camping programs provide an unequalled opportunity and one of the richest experiences they have during their educational career. It is our hope that with the central camp area for outdoor education, all teachers will, in the near future, have the chance to participate in a school camping program and receive credit as part of their total field-work experience.

Recommendations from the 1957 National Conference on Professional Preparation of Recreation Personnel

There is now in the United States an organized camping movement with some fourteen thousand camps and over four million five hundred thousand children. The rising tide of interest in outdoor education involving camp experiences, field trips, farm and garden programs, and travel experiences may soon become a major aspect of the public school program. The interest of park and recreation departments and forestry agencies in wise and proper use of their resources constitutes another large segment of society interested in outdoor education. The growing and varied outdoor pursuits is indicative of the need for consideration of expanded concern for trained leadership.

There is an increasing field for full-time professional personnel in camping outdoor education, and with agencies administering public lands. Increasingly, positions like these will need to be filled by individuals with special competence. For these people some specialized graduate training is needed. In addition to people in the full-time professional field, there is an increasing number of part-time or summer positions. This is particularly evident in the over two hundred thousand camp personnel now serving in summer camps who need help in improving their leadership skills.

Because of the diversity of interest in the outdoor education and camping field, there is some question at this time as to whether a curriculum should be developed encompassing the whole field. Only time will determine whether a different emphasis may be needed.

It is recognized that in a very few cases, probably on a regional level, institutions of higher learning may have a special curriculum in camp administration. In outdoor education, areas of emphasis might be set up as part of the Master's degree in recreation, teacher education, natural resources, or other related fields.

Some Guiding Principles

Whether a camp administration curriculum, or an area of emphasis in outdoor education, is the pattern developed in a particular school the following principles are pertinent:

1. Only those institutions of higher education with proper outdoor areas, staff, and other resources should give such a special program.
2. The needs for professional training in a particular locale will also be a determining factor.
3. An important part of the training program should be in an outdoor setting. Opportunity in the out-of-doors should include field experiences and observation.
4. Since outdoor education is an intra-discipline field, the various resources of the institution should be called upon. These might include conservation, science, forestry, music, arts and crafts, and those other resources related to the outdoor education program.

Uniqueness of the Camping Program

Camping and outdoor education requires certain leadership and administrative skills different in a large part from either general recreation or the traditional school program. The following are some of the characteristics of camping and outdoor education:

1. Education takes place in an informal setting generally in small groups.
2. Learning is largely through direct experiences.
3. The close personal relationship between leader and learner is making possible effective guidance and counseling to meet individual needs of participants.

4. Much of the program is related to the natural environment, which requires special skills and knowledges.

Content Areas for the Camping Specialization

In the field of camping administration, certain knowledges and skills are essential. It is assumed that people in this field will assume certain responsibilities for directing and supervision on the administrative level. The following areas should be included:

- Administration of camps (finances, selection and supervision of staff, health and safety, facility development, management, etc.)
- Program (program construction)
- Child growth and development
- Research methods
- Philosophy of camping and outdoor education
- Direct experience and field experience
- And others as indicated by needs of individuals.

The field of outdoor education is less clearly defined than camping administration. Content in an area of experience will vary from institution to institution depending on such factors as local needs, staff resources, and cooperation of staff members from other disciplines. The following emphases might be considered:

1. Adopting the administrative structure in classroom procedures, for use of the natural environment.
2. Integrating subject matter content with outdoor experiences.
3. Developing knowledge of available community resources for outdoor education.

3. IN-SERVICE PREPARATION

Local Workshops

Dearborn Public Schools

THE Dearborn Public Schools in cooperation with Eastern Michigan College conducts two in-service training workshops each year for classroom teachers, resource personnel, and college students who are involved in the year-round school camping program. The three-week workshops are held at the beginning of the first and second semesters, and the teachers who will have classrooms at camp during the school year have a camping and training experience in preparation for the school program.

The workshop participants actually go through the program activities in the same way as is done by the school campers. This includes camp living, hikes and trips, conservation projects, program planning, and evaluation. The careful planning done by classroom teachers, camp staff college instructors, interns, conservation personnel, and other resource leaders is reflected in the quality of the Dearborn outdoor school program.

A unique phase of the entire program is the affiliation with several teacher preparation institutions including Eastern Michigan College, Michigan State University, Antioch College, Springfield College, and others whereby field experiences in outdoor education are combined with school camping. Many prospective teachers have periods in the school camp varying from one to twelve weeks.

A graduate off-campus course in outdoor education sponsored by Eastern Michigan College and the Dearborn Schools is another example of in-service training. The class meets at the camp one evening a week throughout a semester which adds realism to the course. Plans are underway for a summer session in outdoor education. This will be held at Mill Lake State Group Camp, located in a state recreation area of 14,000 acres where the Dearborn Outdoor School is now being conducted.

Minneapolis Public Schools

One of the richest, yet most inexpensive laboratories for all fields of education, but used the least, is the out-of-doors. It is understandable, for many teachers were taught to handle classes indoors and from materials learned from books and, therefore, feel ill at ease at the thought of moving outside. To be of assistance to teachers, Minneapolis has an Outdoor Education Committee, composed of elementary, junior high-school and senior high-school teachers, principals, lay members, and a consultant appointed by the superintendent of schools. The Committee serves a three-year term and meets once a month. The purpose of this Committee is to stimulate an interest in and appreciation of the values of outdoor education in the community.

Specific objectives are: (1) to help teachers discover the things which can best be taught in the out-of-doors; (2) to suggest, develop, and illustrate methods and techniques for use in outdoor education; and (3) to locate, acquaint, and assist teachers in the use of resources in outdoor education. Emphasis in all activities is placed upon active participation, and teachers discover that it is not necessary to know all the answers; that it is possible for a class and teacher to discover and learn together.

Weekends in a camp, planned for teachers by the Outdoor Education Committee, offer one of the best means for opening up the possibilities of learning in the out-of-doors. By starting out after school on Friday and closing by 4:00 P.M. on Saturday, it gives teachers the feeling that there is still time left for themselves. An informal atmosphere breaks down barriers, and with teachers from all grade levels, principals, consultants, and assistant superintendents present, there is opportunity to get acquainted and appreciate one another in a way which is sometimes difficult in large-city systems.

Friday evening introduces the group to fun activities at the table at dinner time, followed by mixers and games which help one relax, know people better, and just have fun. The evening campfire is a time for songs, inspiration, and learning a bit about what is to follow on Saturday. Saturday starts out with small groups going off to cook breakfast for

themselves. In the morning, various explorations are provided whereby one group might discover a hidden lake and try to find out the evidences of the glacial period; another group might visit the foundation of an abandoned farm and attempt to reconstruct the history of the farm and the community of one hundred years ago. These groups are learning how to see, hear, feel, and to figure out answers to questions for themselves.

In the afternoon, there is an opportunity to make things out of the native materials they might have discovered on their morning trips, so that everyone goes home with something he has made—corn-husk mats, pins, birch candle holders, wall placques out of grasses, or polished stones. Such weekends in the fall, winter, or spring help teachers appreciate and feel comfortable in the outdoors and see the rich opportunities offered with each season.

An after-school in-service program limited to twenty-four teachers, in which the teachers plan with the Outdoor Education Committee the activities that would be most meaningful to them, is valuable from the standpoint of teachers from kindergarten through high school working together and each one getting help so that a class will benefit from the teacher's experiences. Activities that this group participated in consisted of what could be done on the steps of the schools in a five- or ten-minute period, on the school grounds, within the block, or at a nearby city park, covering all subject fields.

One sixth-grade class, whose teacher has been most active on the Committee, took the in-service teachers on exploration trips on their school grounds. Each committee of children had six teachers and used the method of discovery with them. One group of children clustered around an old oak stump could be heard asking the teachers, "How old do think this tree was when it was cut down?" "Were there any years of drought when it was growing?" and "How many years did it grow after it was first used as a fence post?"

The Committee prepared three filmstrips with sound recordings which can be used by teachers to help plan, carry out, evaluate, and follow up on lessons which have been carried on in the out-of-doors. One is at the third-grade level and shows how the class makes use of the school yard each day in its units of work. A sixth-grade class is making use of a city park to introduce a unit in social studies, and an eighth-grade class goes on a day trip to a neighboring lake and woods for its culminating unit on conservation.

Another area in which the Committee is able to give assistance to teachers is helping plan for outdoor experiences and accompanying them on the trip as resource people. One such trip was made by a ninth-grade class which was culminating a unit of study. The class spent the day at a well-known woods forty miles from the city. This group had spent a long time in preparation for the trip with their various committees carrying out all necessary research and other assignments.

When the beaver committee actually found the dam and house and was able to see the chips at the tree stumps and tooth marks on the branches, its reading and studying took on real meaning. When the compass committee led the group through deep woods to a lovely stream that it had located on the geodetic map, their appreciation was all the keener for the accuracy of the *Sylva* compass and their ability to read a map and follow the compass.

It is such experiences as these that makes learning take on real meaning and gives the challenge to youth which is so often lacking in school. Teachers and students alike experience the thrill that comes when the greatest laboratory of all becomes an integral part of the school program.

A State Conservation Workshop

Cooperation is the basis for the seventeen years of continued operation of the Ohio Conservation Laboratory. At the present time, the five state universities, the State Department of Education, and the Division of Wildlife of the Department of Natural Resources are cooperating in sponsoring a workshop that offers undergraduate or graduate credit.

Five full-time instructors and a part-time shop assistant comprise the instructional staff that develops the basic program before the opening of the five-week session. The students and staff cooperatively develop many of the daily programs designed to give the individual every opportunity for improvement in various areas of his own choosing. As the previous preparation and experience of the students varies widely, the program is designed to provide a maximum of flexibility in meeting individual needs. This is achieved by working with small groups in the field and by numerous individual conferences.

Basic instruction is given to all students in soil and water relationships, biotic resources, non-renewable resources, demography, and teaching methods and techniques. While some of the teaching is done indoors, most of it is performed in the out-of-doors, either on organized field trips of a full or half-day duration or by working with small groups in our "outdoor laboratory." This laboratory is the area surrounding one of the lakes of the famed Muskingum Watershed Conservancy District. A fully winterized former NYA camp on the shore of beautiful Leesville Lake is the facility that has housed the Ohio Conservation Laboratory for the past fourteen years.

Four members of the full-time staff are faculty members of universities. All are proficient in general conservation instruction and each is a specialist in one or more fields. The fifth staff member is the supervisor of conservation for the State Department of Education. During all major field trips and for certain sessions on specific topics, a number of resource personnel from Federal or state agencies and other organizations work closely with the staff. All-day tours take the students to the U.S. Department of Agriculture, Coshocton Soil and Water Experiment Station; through part of the Muskingum Watershed Conservancy District; and to

the coal strip-mine area of Eastern Ohio. Half-day trips include a farm under the Soil Conservation Service plan; a forest area under proper management; and a local school yard. The latter site provides students with a number of experiences that may be applied, with modifications, to their own teaching situation.

A unique feature of the laboratory is a small shop, well equipped with hand tools. Students are invited, but not required, to construct their own teaching aids. Over the years, a remarkable number of articles have been produced. They vary from a simple project, such as an insect spreading board or plant press, to complex electrical quiz boards and beautiful display cases. Flannel boards, tree sections, terrariums, papier mache models, insect nets, posters, ozalid and smoke prints, run-off boxes, clinometers, and a host of other aids have been taken back to the classroom and put to immediate use.

Many of the teachers attend the laboratory with some financial assistance furnished by organizations having an interest in promoting conservation education. These teachers not only become aware of conservation problems, but also realize the necessity for action by the schools. They likewise recognize that the out-of-doors, in many instances, is better than any classroom for the teaching of certain skills and understandings about man and his environment. What is more, they feel qualified to supplement their classroom activities through these outdoor experiences. In this respect they can contribute much to the total outdoor education program.

College-Sponsored Workshops and Off-Campus Courses

Indiana University

One of the particular needs of teachers with responsibilities for outdoor education is experience in the outdoor setting that will provide a background of outdoor knowledge and some skill in techniques of working with children in this setting. Several colleges and universities have developed workshops and courses with this need in mind. Two types of such off-campus courses are given by the Department of Recreation of Indiana University at the Bradford Woods Outdoor Education Area, a 2,300-acre forest located twenty-six miles north of the Bloomington campus.

A fifteen-day course in school-camp program activities is conducted in the period between the end of the spring session and the beginning of the summer session. The course, for which graduate credit is given, is conducted in an outdoor setting with numerous opportunities for field trips, conservation projects, work on a nature trail, collecting, demonstration cook-outs, visits to camps in the area, camp construction, *etc.* Lectures and discussions center around program skills and the philosophy of outdoor education. Each member of the group works on an individual project related to the specific teaching situation in which he is involved.

The primary purpose of this course is to help the teacher develop skill in handling school groups out-of-doors. In any such group of teachers, there is considerable variation in background and skill in outdoor activities. It is expected that teachers will supplement this course with content courses in various subject fields if they have not previously done so.

An eight-week summer session for graduate students follows this course at Bradford Woods. During the summer, several outdoor-related courses are offered. One of them is particularly concerned with outdoor education. This course, of five weeks' duration, involves a period of training followed by the actual conducting of a six-day day camp for children from the Indiana University Elementary School. The first three weeks of the course are spent in developing the program for the day camp, and three afternoons a week for each of these three weeks are spent in the camp itself. All aspects of the program are discussed, and members of the class get acquainted with the area and its potentialities for educational purposes. Supplies and equipment are gathered, and the area is made ready for the camp. Responsibilities for the day camp are then divided. Some members of the class serve as counselors; one assumes responsibility for health and safety; another keeps the financial records; another assumes charge of the evening programs; another arranges transportation; and so on through all the responsibilities of the camp. Since there are usually twenty to twenty-five members of the class and only about sixty children in the camp, not all the graduate students can be used as counselors. People with special science skills or other program specialties are used to develop programs in these fields.

Before the camp opens, meetings are held with classroom teachers in an effort to coordinate the camp program with the school program. When the camp begins, one of the teachers serves as camp director. Other teachers attend the camp and participate in the program, but the major responsibility rests with the graduate students.

Following the six-day camp period, evaluation of the camp is made by the campers themselves, teachers, parents, and members of the graduate class. An annual report of the experience is prepared and made available to interested people.

Both of these courses are based on the assumptions that direct experience in the out-of-doors and in working with children in the out-of-doors are among the most significant means of developing leadership for outdoor education. In addition to these two graduate courses, Indiana University is one of the sponsors of the annual Conference on Interpretation Programs, held for three days each spring at Bradford Woods. Though intended primarily for naturalists, many people engaged in school camping attend the workshop and contribute to its program.

*Other Workshops**National Camp*

National Camp is a center for the preparation of advanced leadership in outdoor education and camping. This national training center was founded in 1940, and is operated by the Outdoor Education Association, Incorporated. *National Camp*'s location in the Pocono Mountains of Pennsylvania, near Matamoras, overlooks a part of the beautiful Delaware Valley. Comprising a large tract, nearly 1,000 acres of woodland and meadows adjacent to thousands of acres of state forest, the site offers an abundance of wildlife and geographical phenomena.

The purposes of this unique training center are: (1) to give impetus to the concept of outdoor education and school camping projected in the early '30's; (2) to prepare advanced leaders for the program; (3) to promote education and school camping through special conferences, workshops, institutes, demonstrations, and projects; and (4) to operate a camp for boys and girls as a laboratory for observation, study, and research by those who attend the leadership training program.

As the interest in outdoor education and school camping has increased, hundreds of teachers, college faculty members, administrators, and camp and other youth-serving agency personnel have attended regular sessions and institutes during the summer sessions. As greater numbers of schools and organizations turn to the out-of-doors for a more realistic approach to meet the present-day needs of youth, there is an ever-increasing demand for improved leadership.

The program at *National Camp* is devoted to advanced study and practice. Participants are helped to develop specific plans for their own schools, colleges, organizations, or communities. The summer session is a practical field course in administration and leadership of outdoor education, with special emphasis on the development of year-round programs. Students learn through many different kinds of field trips, group and individual conferences, general sessions, research, and participation in all phases of camp living.

Construction of different types of shelters and equipment, exploration trips, overnight camping, menu planning and food marketing, nature and conservation activities, and many kinds of field trips are among the practical experiences offered. In addition to this wide range of experiences, assistance is given to each student concerning his own problem. The large and very complete library is available for use in study and research.

Since the founding of *National Camp*, many hundreds of key leaders in this new phase of education have gone out to schools, colleges, and communities in all parts of the country and instituted programs in outdoor education and school camping.

Audubon Camps

The consensus of most educators is that the best kind of learning is through direct experience. The National Audubon Society applies this

technique to the teaching of natural science in various camp locations throughout the country.

A critical look at the teacher-supply situation brings abundant evidence of the increasing numbers who are seeking information, understanding, and knowledge in this field. Thus, Audubon Camps came into existence because, generally speaking, state teachers colleges and normal schools did not train student teachers to present nature and conservation subjects effectively, or to integrate these subjects with existing curriculums. In addition, the Camp programs were designed to build a majority public opinion favoring wise use of natural resources.

Located in Maine, Connecticut, Wisconsin, and California, Audubon Camps are operated for teachers, youth leaders, and others with a professional and/or avocational interest in nature and conservation. Members of Audubon Camp teaching staffs are selected for their background in a specialized field of biological science and for their ability as all-round naturalists. They interpret nature in terms of process. Interested in *what* is there, their chief concern lies with "What goes on there."

Because participation is an effective learning technique, total enrollment in the Camps is limited and groups in the field number only around a dozen. This makes possible the free and easy exchange of ideas and experiences and readily breaks down the fears that inhibit people from voicing questions when in large gatherings. Of equal importance, the small group provides the opportunity for the leader to take *time* to explain and to reiterate until understanding is achieved. This develops a feeling of security on the part of the individual and establishes the important realization that repetition is a vital though often minimized ingredient in learning at all ages.

It is interesting to note that Audubon Camp programs do not practice specialization nor play to the pitfalls of highlighting and comparing one experience against another. Rather, they seek to take what is at hand, be it sea, shore, meadow, forest, or mountain, and utilize to the fullest what it has to tell. No attempt is made during a single session to tell *all* there is to know about any one subject. Those who come with knowledge and background in a given field find the intriguing opportunity to broaden horizons in other areas. The uncertainties of the newcomer who is doubtful of being able to understand because of a lack of scientific background are immediately dissipated because the program is so varied and does not require tests or examinations. For the in-betweens, the generalists who have dabbled in all fields yet never seen them as a related whole, there lies the opportunity to develop important new over-all concepts. It is the moulding together of such widely divergent interests and backgrounds into common understanding that makes for a lasting learning process. The very lack of over-emphasized highlights removes the necessity of comparisons between what happened on each consecutive day, and sends campers home unable to pinpoint any one experience against another.

They recall that the program as a whole was enjoyable, building a reservoir of meaningful memories and resources to be drawn upon in the future.

Lastly, and perhaps the most telling accomplishment of an Audubon Camp experience, is the transformation in two short weeks of strangers into friends with a common bond of interest in nature and conservation and the determination to *do* something. With the program emphasis on *all* living things, their interdependence on each other and relationship to us as human beings, the word ecology takes on hitherto untold meaning, resulting in a fraternity whose unity of purpose is the conservation of natural resources. This, like the enlarging snowball rolling downhill, is the aim of all Audubon Camps.

Red Cross Courses

The American National Red Cross and, more specifically, its educational services are able to provide the professional teacher the opportunity to receive in-service training in first aid, water safety, small craft safety, and home nursing. Graded courses in first aid, water safety, and small craft safety, designed to meet the needs of all, on whatever level desired, are available through more than 3,700 Red Cross chapters. Instructor courses in these subjects are probably of most importance to professional teachers. In these courses, taught by designated representatives of the Red Cross, the emphasis is on the "how" of teaching rather than on the development of personal skills.

A special course, designed for professional teachers, leading to an instructor's certificate in first aid has been prepared for teachers who have completed the standard and advanced first aid courses. Teachers who have completed the American Red Cross senior life saving course are eligible to enroll in the water safety instructor course. Instructor courses in small craft safety, including boating, canoeing, and sailing, have been developed for those who have passed the basic courses in these activities.

Teachers working with physically limited students will find the instructor course in swimming for the handicapped to be of particular interest. Authorized Red Cross water safety instructors are permitted to enroll in the course for certification. Teachers who are not water safety instructors, but who express a desire for this type of training, may audit the course.

Instructor courses in first aid, water safety, and small craft safety are taught in Red Cross chapters, in many colleges and universities, and in Red Cross aquatic schools. There is no fee for any Red Cross course.

Another course of interest and one that is open to teachers of home economics, physical education, and related subjects is the home nursing instructor course. Teachers completing the course are authorized to teach certificated courses in care of the sick and injured.

Teachers who desire to enroll in one or more Red Cross courses are encouraged to contact the nearest Red Cross chapter. The address can be found in the local telephone directory.

CHAPTER V

A Look Into the Future

THREE can be little doubt that education in the outdoors is a timely development in the American school system. There is widespread acceptance by schools and colleges of the values implicit in using *all* community resources, including the out-of-doors, in the educative process. In conjunction with the phenomenal growth of outdoor education programs during the past two decades, this forecasts unprecedented developments in the future.

It is clear that good learning and the outdoors are inseparable—that more complete use of the outdoor laboratory is necessary as a means of relating man to his natural environment—to give him "roots in the soil" in this atomic age. The simple, but fundamental pronouncements, testimony of experience and observations which is contained in this book, constitutes a broad charter for outdoor education which includes the following points:

1. Education in the outdoors, through direct experience, is in keeping with the best that is now known about how the individual learns.
2. Today's living, with its large population centers and automation, has deprived many children and youth of contact with the land. Schools must, therefore, provide outdoor learning opportunities in order that they may renew this contact as a normal part of growing up.
3. The emerging community school—the instrument for serving those learning and living needs of present-day society with which education has been charged—makes maximum use of all community resources, including the out-of-doors.
4. Achievement of the purposes and objectives of this ever-changing institution can be completely realized only through a community curriculum—the sum total of all learning situations provided by the many groups and agencies.
5. There is more emphasis on "creative education" that helps people find satisfactions—many of them in the outdoors—during the increasing amount of off-the-job time at their disposal.
6. Outdoor education is a broad term—not a discipline nor a subject-matter field—that includes those learning experiences indigenous to the natural environment and the skills, appreciations, and attitudes necessary for maximum satisfactions and enjoyment in outdoor pursuits.



Students improve and protect the land for the future.

7. Knowledge, skills, attitudes, and appreciations that are acquired *in* and *for* the outdoors are integral parts of general education and are included in appropriate places in many disciplines, school subjects, and activities.

8. Teachers should be equally competent to teach *in* and *outside* the classroom, wherever the environment is most conducive to the desired learnings.

9. Techniques and methods basic to good teachings are equally effective in both kinds of "classrooms," indoor and out.

10. There are many settings suitable for learning *in* and *for* the outdoors—camps, parks, forests, farms, gardens, and open spaces.

11. All schools and community agencies charged with the responsibility for the education of children have available to them some type of outdoor setting suitable for learning.

12. Through cooperative planning at local, state, and Federal levels, more adequate facilities, leadership, and equipment for outdoor education may be made available. This will secure more efficient use of the tax dollar by eliminating needless duplication of effort.

13. If *all* people are to come into full possession of their outdoor heritage, it is of paramount importance that there must be inter-departmental and inter-agency cooperation at the local, state, and Federal levels.

14. Some of the basic needs of youth, unmet by schools with traditional programs, can be satisfied by the community school. If this challenge is not met, it will become necessary, by default, for other agencies than the school to assume this responsibility. An example may be found in the work-learning experiences on the land for older youth—as furnished by the CCC. Education needs to grasp and hold militant leadership in providing such programs under the jurisdiction of appropriate local and state educational and conservation authorities.

Complete realization of the heritage of every citizen to experience the physical, mental, and spiritual benefits from God-given natural resources will be reflected in broader and richer educational opportunities for which schools have a major responsibility. A community school that is truly the embodiment of the yearnings of the people for the education of their children and for themselves is a service agency in which the function of the school administration and teachers is to help people learn. The future will find teachers and learners increasingly going to the outdoors to achieve broad educational goals and specific classroom objectives. Classrooms and school sites, such as found in "park schools," will facilitate the smooth flow in and out of school buildings into all the appropriate open spaces of the immediate and greater community—to camps, in forests, on farms.

As children and youth find new and exciting adventures in learning outdoors, the label of the leader will matter little—whether it be educator,

conservationist, recreationist, youth leader, or minister—for all are teachers in the broadest sense. Youth will become benefactors to the land, and the association with mother earth will be good for our junior citizens as they find opportunities to improve and protect the land.

The process will not only help in the conservation of natural resources; it will also serve to prevent human "erosion." Such education is not only essential to the "growing up" process, it is also a balm to the tensions of adulthood and adds a glow to the later years. These things, envisioned for the future, will give youth a stake in the land which will be reflected in the kind of citizenship that is the essence of democracy.

Resources

NATIONAL ORGANIZATIONS AND THEIR MAGAZINES

American Association for Health, Physical Education, and Recreation, 1201 Sixteenth Street, N. W., Washington, D. C. *The Journal of Health, Physical Education, Recreation.*

American Camping Association, Inc., Bradford Woods, Martinsville, Indiana. *Camping Magazine-Conservation in Camping*, and other publications on camping.

American Forestry Association, 919 Seventeenth Street, N. W., Washington, D. C. *American Forests*.

American Museum of Natural History, Seventy-Seventh Street and Central Park West, New York, New York. *Natural History*.

American Nature Association, 1214 Sixteenth Street, N. W., Washington, D. C. *Nature Magazine*.

American Youth Hostels, Inc., 6 East 39th Street, New York, New York.

Appalachian Mountain Club, 5 Joy Street, Boston, Massachusetts.

Audubon Society of Canada, 177 Jarvis Street, Toronto 2, Ontario, Canada. *Canadian Nature*.

Boy Scouts of America, 2 Park Avenue, New York, New York. *Boy's Life*.

Camp Fire Girls, 16 East 48th Street, New York 17, New York.

4-H Clubs, Extension Service, U. S. Department of Agriculture, Washington 25, D. C.

Friends of the Land, 1368 N. High Street, Columbus, Ohio. *The Land*.

Garden Clubs of America, 15 East 56th Street, New York, New York.

Girl Scouts of U. S. A., 155 East 44th Street, New York 17, New York.

Izaak Walton League of America, LaSalle Hotel, Chicago, Illinois. *Outdoor America*.

National Association of Angling and Casting Clubs, 960 Paul Brown Building, St. Louis 1, Missouri. *The Creel*.

National Audubon Society, Inc., 1006 Fifth Avenue, New York, New York. *Audubon Magazine*.

National Council of State Garden Clubs, 500 Fifth Avenue, New York 16, New York.

National Geographic Society, 1146 Sixteenth Street, Washington 6, D. C. *National Geographic Magazine*.

National Rifle Association, 1600 Rhode Island Avenue, N. W., Washington, D. C. *The American Rifleman*.

National Wildlife Federation, 232 Carroll Street, N. W., Takoma Park 12, Washington, D. C.

Young Men's Christian Association, 291 Broadway, New York, New York.

Young Women's Christian Association, 600 Lexington Avenue, New York, New York.

SERVICE ORGANIZATIONS

(These organizations provide many helpful materials, lists of which may be obtained upon request)

American National Red Cross, Seventeenth and D Streets, N. W., Washington, D. C.

Associated Fishing Tackle Manufacturers, Bond Building, Washington, D. C.

Athletic Institute, 209 South State Street, Chicago, Illinois.

Junior Safety Institute, 230 N. Michigan Avenue, Suite A, Chicago Illinois.

Outboard Boating Club of America, 307 North Michigan Avenue, Chicago, Illinois.

National Recreation Association, 8 West Eighth Street, New York, New York.

Sport Fishing Institute, Bond Building, Washington 5, D. C.

Sporting Arms and Ammunitions Manufacturers' Institute, 250 East 43rd Street, New York, New York.

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AAHPER. *Children in Focus*, the 1954 Yearbook. Washington, D. C.: The Association. 1954.

AAHPER. *Fitness for Secondary-School Youth*. pp. 85-123. Chapter 4. Washington, D. C.: The Association. 1956.

AAHPER. *Shooting and Firearms Education*. Washington, D. C.: The Association. 1956.

American Association of School Administrators. *Conservation Education*. Washington, D. C.: The Association. 1951.

American National Red Cross. *Canoeing*. Garden City, New York: Doubleday and Company, Inc. 1956.

Athletic Institute. *Planning Facilities for Health, Physical Education, and Recreation*. Chicago: The Athletic Institute.

Athletic Institute. *The Recreation Program*. Chicago: The Athletic Institute. 1954.

Benson, Reuel A.; Jacob A. Goldberg; and others. *The Camp Counselor*. New York: McGraw-Hill Book Company, Inc. 1951.

Burns, Gerald. *Programs of the Modern Camp*. New York: Prentice-Hall, Inc. 1954.

Camp Sites and Facilities. New York: Boy Scouts of America.

Clarke, James M. *California's Pilot Project in Outdoor Education*. Stanford, California: The Stanford University Press. 1951.

Clarke, James M. *Public School Camping*. Stanford, California: The Stanford University Press. 1951.

Damon, G. E. *Gun-Fun with Safety*. Huntington, West Virginia: Standard Publications, Inc. 1947.

Dimock, Hedley S., and others. *Administration of the Modern Camp*. New York: Association Press. 1948.

Donaldson, George W. *School Camping*. New York: Association Press. 1952.

Elliott, Russ. *Your Shotgun vs. You*. Kansas City, Missouri: Brown-White-Lowell Press. 1955.

The Fisherman's Handbook. Oxford, Ohio: The Fisherman's Press, Inc. 1955.

Friet, Edwin L., and Peterson, Del G. *Design for Outdoor Education*. Yakima, Washington: P. S. Printers, Inc. 1956.

Gilliland, John W. *School Camping, A Frontier of Curriculum Improvement*. Washington, D. C.: Association for Supervision and Curriculum Development. 1954.

Gilliland, John W. *A Study of Administrative Factors in Establishing a Program of School Camping*, Doctoral Thesis, New York University. 1949.

Hammett, Catherine T., and Musselman, Virginia. *The Camp Program Book*. New York: Association Press. 1954.

Hillcourt, William. *Field Book of Nature Activities*. New York: G. P. Putnam's Sons. 1950.

Irwin, Frank L. *The Theory of Camping: An Introduction to Camping in Education*. New York: A. S. Barnes and Company. 1950.

Kelley, Earl C. *Education for What Is Real*. New York: Harper and Brothers, Publishers. 1947.

Kjellstrom, Bjorn. *Be Expert with Map and Compass*. New York: American Orienteering Service, 220 Fifth Avenue. 1955.

Leopold, Aldo. *A Sand County Almanac*. New York: Oxford University Press. 1949.

Mackintosh, Helen K. *Camping and Outdoor Experiences in the School Program*. Washington, D. C.: Superintendent of Documents, United States Government Printing Office. 1947.

Mac-Millan, Dorothy Lou. *School Camping and Outdoor Education*. Dubuque, Iowa: Wm. C. Brown Company. 1956.

Manley, Helen, and M. F. Drury. *Education Through School Camping*. St. Louis: C. V. Mosby Company. 1952.

Michigan State University. *Nature Trails and Labels*. Park Management Bulletin Number 5. East Lansing: The University. 1957.

Michigan State University. *Outdoor Education—A Way to Better Living*. Park Management Bulletin Number 6. East Lansing: The University. 1957.

Mitchell, Viola, and Crawford, Ida. *Camp Counseling*. Philadelphia: W. B. Saunders Publishing Company. 1950.

National Association of Biology Teachers. *Handbook for Teaching Conservation Resource Use*. Ann Arbor, Michigan: The Association. 1955.

National Association of Secondary-School Principals. "Camping and Outdoor Education," edited by L. B. Sharp and E. DeAlton Partridge, *Bulletin of the National Association of Secondary-School Principals*, 31:147, May, 1947. (Out of print.)

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Thurston, Lee M. *Community School Camping*. Lansing: Indiana State Superintendent of Public Instruction. 1950.

Thurston, Lee M. *Community School Camps (A Guide for Development)*. Lansing: Indiana State Superintendent of Public Instruction.

Thurston, Lee M. *A Community School Work-Learn Camp*. Lansing: Indiana State Superintendent of Public Instruction. 1951.

United States Office of Education. *Camping and Outdoor Experiences in the School Program*, U. S. Office of Education Bulletin, 1947, No. 4. Washington, D. C.: Superintendent of Documents, United States Government Printing Office.

Using Resources Wisely. Albany: New York State Education Department. 1956.

Vinal, William Gould. *Nature Recreation*, Group Guidance for the Outdoors. New York: McGraw-Hill Book Company. 1940.

Vinal, William Gould. *The Outdoor Schoolroom for Outdoor Living*. Cohasset, Massachusetts: Vinehall. 1952.

AUDIO-VISUAL AIDS

(*Films on Outdoor Recreation*)

Federal government agencies, such as U. S. Department of Agriculture, Soil Conservation, and Forest Service

Regional and state offices of the soil conservation service

State departments of conservation

University film libraries

State University Extension Service
National Audubon Society Photo and Film Department
Film rental libraries

FEDERAL GOVERNMENT

Many agencies of the Federal government publish both free and sales literature which is useful for recreation program planning as it relates to the agency fields. The Superintendent of Documents, Washington 25, D. C., will furnish selected lists of sales publications. All orders should be addressed to the Superintendent of Documents address rather than to the agency.

In addition, many of the agencies make direct free distribution of leaflets, publications lists, charts, posters, *etc.*, upon request. Several of the agencies lend films and other visual aids, or issue lists of their films which may be rented from film libraries. The U. S. Office of Education issues a periodical list of selected government films, and another of film libraries.

The following list includes agencies most likely to have material useful in outdoor recreation. All agencies are addressed: Washington 25, D. C.

U. S. Department of Agriculture (composite publications list)
Forest Service
Soil Conservation Service
Extension Service
The Smithsonian Institute
U. S. Department of Health, Education, and Welfare
Office of Education
Public Health Service
U. S. Department of the Interior
National Park Service
Bureau of Reclamation
Bureau of Land Management
Bureau of Indian Affairs
Bureau of Mines
U. S. Geological Survey
Fish and Wildlife Service

STATE GOVERNMENT

State Department of Conservation
State Department of Public Instruction
State University
State Agricultural College
State 4-H Clubs (Extension Service, State College of Agriculture)
State Department of Health

COUNTY

County agricultural agent or local agricultural county extension office
County forester or game manager

LOCAL OR COMMUNITY

Game wardens
Forest rangers
Park rangers
Soil conservation service technicians
Soil conservation district personnel
Agriculture teachers in high schools and vocational schools

Best Books of 1956 on Vocational Guidance

ROBERT HOPPOCK

ACH year the author of this article undertakes to review all new books on vocational guidance, except those devoted primarily to occupational information, which are reviewed in the *Career Index* and in the *Occupational Index*. The best of the books dealing with the theory and practice of vocational guidance are annotated in an annual list; this is it. Included are some earlier references which did not reach us in time to be included in the 1955 list.

Inclusion of a book in this list does not mean that it is considered infallible. It does mean that the book has been compared with other publications and considered to contain useful information that would be of interest to readers who try to keep us up to date on the better literature in this field. Apologies are made in advance to authors and publishers whose books have not been included and to those who find the annotations inadequate.

ADAMS, GEORGIA, AND TORGERSON, THEODORE L. *Measurement and Evaluation for the Secondary-School Teacher*. New York: Dryden Press. 1956. 658 pages. \$5.75. Includes chapters on the measurement of aptitudes and interests, and on using evaluation data in individual and group guidance. Also a selected list of tests for the secondary school.

APTEKAR, HERBERT H. *The Dynamics of Casework and Counseling*. New York: Houghton Mifflin Co. 1955. 262 pages. \$3.50. An analysis of Freudian and Rankian psychologies, their similarities and differences, their application to social casework and counseling, and the conflicts which have resulted. Casework, counseling, and psychotherapy are differentiated and defined. No specific applications to vocational counseling.

BOGUE, JESSE P. *American Junior Colleges*. Fourth edition. Washington, D. C.: American Council on Education. 1956. 584 pages. \$8. Location, accreditation, history, calendar, requirements, fees, student aid, staff, curricula, enrollment, graduates, foreign students, library, publications, finances, buildings, grounds and administrative officers of 531 accredited junior colleges in the continental United States, Alaska, and the Canal Zone. Arranged by states. Indexed by name, curricula, and denominational affiliation. Five articles on the history and status of junior college education. Transfer and terminal curricula in 48 areas.

Robert Hopcock is Professor of Education in the School of Education, New York University, Washington Square, New York, New York.

BORDIN, EDWARD S. *Psychological Counseling*. New York: Appleton-Century-Crofts, Inc. 1955. 409 pages. \$5. An excellent book on psychotherapy. Two pages on vocational counseling, one on placement counseling.

BYRN, DELMONT K., editor. *How To Create Your Career*. Washington 5, D. C.: National Vocational Guidance Association. 1956. 32 pages. 30c. Simple, readable suggestions for young people on choosing a vocation.

COTTINGHAM, HAROLD F. *Guidance in Elementary Schools: Principles and Practices*. Bloomington, Ill.: McKnight and McKnight Publishing Co. 1956. 325 pages. \$4. A description of 180 successful guidance practices. Securing information about pupils; studying children in faculty groups; identifying pupil problems; assisting pupils individually and in groups; school and community resources; initiating organizing, and evaluating guidance programs; on-the-job training for guidance services; trends and future developments.

DARLEY, JOHN G., AND HAGENAH, THEDA. *Vocational Interest Measurement, Theory and Practice*. Minneapolis: University of Minnesota Press. 1955. 279 pages. \$5. A review and analysis of research on the Strong Vocational Interest Blank. The meaning of work and jobs; the structure of interest measurement; analysis of interest patterns; personality and interests; origin and development of interests; theoretical considerations; individual cases.

EDGERTON, A. H. *A Career-Planning Guide*. Chicago: World Book Encyclopedia. 1956. 48 pages. \$1. Chapters on what you, the parent, can do; personality characteristics; special abilities; ways of working; how to see your boy or girl as others do; career interests; how to find out more about career opportunities.

Employment After College: Report on Women Graduates, Class of 1955. Washington, 25, D. C.: Superintendent of Documents. 1956. 33 pages. 25c. Tabulation and summary of replies from 2,919 women graduates of 108 colleges and universities, received six months after their graduation. Employment compared with major field of study, primary job source, and salary. Marital status, continuing education, future plans.

Estimates of Worker Trait Requirements for 4000 Jobs. Washington 25, D. C.: Superintendent of Documents. 1956. 158 pages. \$2.25. Judgments of occupational analysts on training time, aptitudes, temperaments, interests, physical capacities, and working conditions. Prepared by U. S. Employment Service.

FRANK, L. K.; MAY, R.; AND OTHERS. *Psychotherapy and Counseling*. Annals of the New York Academy of Sciences. 1955. Pages 319-432. \$3.50. Reports of study commissions from five professions: medicine, psychology, social work, the ministry, and counseling and guidance, describing current practices and methods of training. One chapter on vocational counseling.

GORDON, IRA J. *The Teacher as a Guidance Worker. Human Development Concepts and Their Application in the Classroom*. New York: Harper and Bros. 1956. 350 pages. \$4.50. Understanding human behavior; the child as a growing organism; understanding community re-

sources; contribution of peers to self-development; the child's self; the teacher as a group worker, as a counselor, as an action researcher.

GREENLEAF, WALTER J. *Visual Aids List To Accompany Occupations and Careers*. New York: McGraw-Hill Book Co. No date. 29 pages.

Guidance of Children in Elementary Schools. Brooklyn, N. Y.: Board of Education. 1956. 271 pages. 75c. Organization, administration, techniques. Observing, recording, interview, tests, case study, sociogram, language arts, dramatics, play, puppetry, art. Very little on vocational guidance.

HALL, ROBERT KING, AND LAUWERYS, J. A. *Yearbook of Education. Guidance and Counseling*. Yonkers: World Book Co. 1955. 644 pages. \$8.50. Forty-one chapters on as many aspects of guidance in several nations. Historical and philosophical background, areas of guidance, techniques and organization, world frontiers.

Improving the Work Skills of the Nation. Proceedings of a Conference on Skilled Manpower. New York: Columbia University Press. 1955. 203 pages. \$3.50. A report of the National Manpower Council.

IRWIN, MARY *American Universities and Colleges*. Seventh edition. Washington 6, D. C.: American Council on Education. 1956. 1210 pages. \$12. Location, accreditation, history, calendar, requirements, fees, departments, staff, graduate work, programs and activities, recent developments, degrees, enrollment, foreign students, library, publications, student aid, finances, buildings, grounds and administrative officers of 969 accredited institutions in the United States, including Alaska, Hawaii, and Puerto Rico. Arranged by states, indexed by names. Lists of 2,016 approved professional schools in 23 fields. Doctorates awarded by 159 graduate schools. Academic costume code. Degree abbreviations. Seven chapters on education in the United States including one on the foreign student.

Job Guide for Young Workers. Washington 25, D. C.: U. S. Employment Service. 1956-1957. 67 pages. 40c. Employment prospects, qualifications, duties, advancement in 84 entry jobs frequently filled by young people leaving high school.

JUDKINS, JAY. *Directory of National Trade Associations*. Washington 25, D. C.: Superintendent of Documents. 1956. 57 pages. 40c. Name, address, chief executive and title of 2,000 organizations, plus 60 national societies of engineers. Key word index. Summary data on budgets, staffs, and activities of associations in general.

LEONARD, EUGENIE ANDRUSS. *Origins of Personnel Services in American Higher Education*. Minneapolis: University of Minnesota Press. 1956. 146 pages. \$3. Colonial legislation, objectives of early colleges and beginnings of personnel services. Discipline, education of women, vocational education, citizenship, religion, housing, boarding, and other services from 1630 to 1862. Well documented. Many interesting and enlightening contrasts with modern education.

Manpower and Education. Washington 6, D. C.: National Education Association. 1956. 128 pages. Paper, \$1.25; cloth, \$1.75. A statement by the Educational Policies Commission. Manpower problems, policies,

and democratic values. Education and career. Guidance and personnel services. Educating the gifted. Obtaining teachers.

McDANIEL, HENRY B. *Guidance in the Modern School*. New York: Dryden Press. 1956. 526 pages. \$5.75. A basic text for beginners. Guidance in elementary and secondary schools. Counseling, abilities, aptitudes, and interests. Occupational information and vocational counseling. Adapting the school to students' needs. Group activities. Evaluation. Counselor qualifications. "Two . . . areas are of primary importance . . . individual inventory and counseling."

MCQUEEN, NOEL, AND MILDRED. *Annual Guidance Index*. Chicago: Science Research Associates. 1956. 55 pages. \$1.50. Annotated bibliography of 300 publications on guidance and on various occupations. Arranged and indexed by subject.

MICHELS, MARJORIE E. *Occupational Information, a Classified Bibliography*. Berkeley, California: Counseling Center, University of California. No date. 23 pages. \$1. ". . . some 280 references . . . from 1930 to the summer of 1955" on function, sources, evaluation, collection, classification, filing, methods of using and counselor training in occupational information. Not annotated, but unusually comprehensive. A few typographical errors in authors' names.

1956 *Directory of Counseling Agencies*. Washington 5, D. C.: American Personnel and Guidance Association. 1956. 56 pages. \$1. An approved list.

PALMER, GLADYS L., AND BRAINERD, CAROL P. *Labor Mobility in Six Cities*. New York: Social Science Research Council. 1954. 177 pages. Paper, \$2.25; cloth, \$2.75. Analysis of 13,000 work histories collected by interviews in Chicago, Los Angeles, New Haven, Philadelphia, St. Paul, and San Francisco to learn "why some workers move around in the labor market while others do not." The "most comprehensive existing source of information on the work experience patterns and mobility of the labor force." Concerned mainly with changes from one employer to another, rather than with changes of assignment within one company.

PETERSON, DORA W., AND OTHERS. *NVGA Bibliography of Current Occupational Literature*. Washington 5, D. C.: National Vocational Guidance Association. 1956. 40 pages. \$1. Books, pamphlets, magazine articles, and posters published between January 1954 and July 1955, and evaluated by NVGA standards. Arranged alphabetically following Bennett's *Occupations Filing Plan*. Annotated by symbols. Includes a reprint of NVGA standards and a list of publishers.

SHOSTECK, ROBERT. *College Finder*. Washington 5, D. C.: B'nai B'rith Vocational Service Bureau. 1955. 448 pages. \$3.50. Classified list of 1800 colleges and universities arranged by eight-digit code numbers to facilitate selection by type of institution, region, environment, cost, size, control, sex, and military training. Cross-indexed under 137 fields of study with number of degrees granted in the field. Cross-indexed geographically by states, with student religious organizations indicated.

STRONG, E. K., JR. *Vocational Interests 18 Years After College*. Minneapolis: University of Minnesota Press. 1955. 207 pages. \$3.75. Interest scores of former college students compared with the occupations in which

the men were later engaged. There are "78 chances to 22 that a man with an A rating will enter that *specific* occupation and 83 chances to 17 that a man with a C rating will not enter the occupation."

WARNER, W. LLOYD, AND ABEGGLE, JAMES C. *Big Business Leaders in America*. New York: Harper & Bros. 1955. 243 pages. \$3.75. A companion volume to *Occupational Mobility in American Business and Industry* which was included in best books of 1955, this book contains less objective and more subjective data and is written for the general public rather than for the scholar. Based on a study of 8,000 men, it discusses their origins, education, careers, wives, relationships with parents and others.

WARTERS, JANE. *High School Personnel Work Today*. Second edition. New York: McGraw-Hill Book Co. 1956. 358 pages. \$4.75. A survey of the literature, designed to coordinate the important concepts of student personnel work. Foundations in education, industry, psychology, and sociology. Counseling. Helping the individual to be understood, to learn about the world of work, to become socialized, and to progress. Coordinating and improving the program.

The Book Column

Professional Books

Annual Report, 1955-56. Battle Creek, Michigan: W. K. Kellogg Foundation. 257 pp. This book briefly describes some of the many activities in which the Foundation has been engaged during the year. Included are: education, medicine, public health, dentistry, hospitals, nursing, agriculture, Latin America, the secretary's and the treasurer's reports, a list of international fellowships awarded, and a list of the personnel of the Foundation.

McALLISTER, M. K., Chairman. *A Basic Book Collection for High Schools*, sixth edition. Chicago: American Library Assn., 15 East Huron St. 1957. 195 pp. Probably \$2.75. After many years, this book is still unrivaled as the selective list in the high-school field. The latest edition covers nearly 1,500 titles grouped according to the Dewey classification system, with a generous listing of professional helps for librarians and teachers and separate lists of magazines, and selection aids in the audio-visual field. Decimal classification numbers and subject headings are given for all titles, H. W. Wilson catalog cards are indicated where available, and Library of Congress card numbers are noted. Annotations summarize the content of each title, indicating the general reading level where relevant. A must for the small or new school library, and of continuing importance for all libraries wanting an authoritative check on the completeness of their basic collection.

BERNER, E. R., Chairman. *A Basic Book Collection for Junior High Schools*, second edition. Chicago 11: American Library Association, 50 East Huron St. 1956. 135 pp. \$2. This new edition takes its place as a full-fledged partner with the other *Basic Book Collections*. The total number of titles listed has been increased to more than 1,000—an increase which shows up particularly in fiction, short stories, and science sections. The new book outlines a balanced collection, with complete buying and cataloging information for every title: prices, publishers; Decimal classification numbers, subject headings, and H. W. Wilson catalog cards noted where available. The content of each book listed is summarized in brief annotations. The titles included represent the considered judgment of junior high-school teachers and librarians as to the best available books in each subject area. As in the other *Basic Book Collections*, the titles included range in time from the recently published to the established classic of children's literature.

BIDDLE, W. W.; and L. J. BIDDLE, collaborator. *Growth Toward Freedom*. New York 16: Harper and Brothers. 1957. 185 pp. \$3. It is time, say the authors of this volume, that higher education recognize its responsibility to the community-at-large—the neighborhood and the city, the rural and the urban community; the national and the international community. Out of the experiment in community education at Earlham College comes this challenging concept. The authors state that the responsibility of the liberal arts college is one of educating the citizen in the community as well as educating its students. Further, they point out, it is necessary to educate the student in and as part of the community, if they are to relate their learning experiences to socially useful ends.

Educational workcamping, teaching methods for students, teaching methods for citizens, and community dynamics for foreign lands are among the provocative subjects advanced in this fresh appraisal of college responsibilities. College administrators, curriculum planners, and everyone interested in the direction of higher education will find this volume a stimulating definition of the purposes of education.

BOYD, G. A., and E. L. FURNESS. *Diagnostic and Instructional Procedures in the Language Arts*. Laramie: The Curriculum and Research Center, College of Education, University of Wyoming. 1956. 202 pp. This book presents general background information for the busy classroom teacher which she will need to understand the scientific studies which have given a new foundation for effective and efficient language teaching. Most of these studies have hitherto appeared in professional journals where they are inaccessible to the majority of teachers. They also lack organization, and give the reader the impression of a vast aggregation of facts having little connection with each other. Every so often it is good to summarize and interpret the accumulation of scientific research, to take an inventory of our stock in trade, to map the way we are traveling, and to adapt language instruction to the times. The book should also be of benefit indirectly to the school boy or girl being initiated into the intricacies of written and spoken language. The learning activities in the remedial and developmental language program described in the book will enable teachers to help their pupils to speak clearly, read understandingly, write legibly, and spell correctly.

BOYDEN, D. D. *An Introduction to Music*. New York 22: Alfred A. Knopf, Inc. 1956. 500 pp. \$7.50. In this new text, the fundamentals of music discussed in Part I are illustrated with pieces drawn from the review of the literature in Part II, and the two sections are further related by extensive cross-reference. This gives the advantage both of a separate presentation of the basic processes of music and the literature, and of a constant dovetailing of the analysis of the literature with the discussion of fundamentals. The result is a book which, while assuming no previous knowledge, makes its analyses in musical, not literary or impressionistic, terms.

The literature is treated chronologically and quite comprehensively, covering the standard repertory and including a full discussion of the leading composers of the present day. The arrangement, since the various sections are both independent and interrelated, provides for maximum flexibility of use in the classroom. Suggested reading, listening, and other assignments constantly move the student beyond the immediate discussion; and materials for further study provide substance for more advanced students who wish to pursue the subject further. Diagrams, verbal analogies which illustrate complex ideas, musical examples, and illustrative plates help make the discussion more concrete. This book will provide a teachable basis for a course in music appreciation.

COOK, LLOYD and ELAINE. *School Problems in Human Relations*. New York 36: McGraw-Hill Book Company. 1957. 304 pp. \$5.50. This is a study of problems in human relations in and about schools and of what was done, or might have been done, to solve them. The book consists mainly of concrete cases gathered by the authors as consultants to schools and communities, plus data from the social sciences. The authors are educational sociologists, engaged in college teaching and in field research.

The first section of the book defines human relations education, discusses methods of problem solving, and suggests kinds of learning from which the aims of a specific course can be planned.

The following section, which is the basic division, consists of nine case-centered chapters concerned with: first teaching, room order, individual differences, inter-group relations, mass media, nonclass activities, school-home relations, area study and action, and school head and staff relations. The final section deals at length with the teacher-leader role in "change action."

COUNTS, G. E. *The Challenge of Soviet Education*. New York 36: McGraw Hill Book Company. 1957. 342 pp. \$6. Are you aware that the Soviet Union is graduating two or three times as many engineers as is the United States? Or that the three per cent expenditure of national income for education in this country compares, according to Soviet statistics, with ten per cent in the Soviet Union? Experts warn it is conceivable that, in the not too distant future, the Russian system of education may surpass our own.

The author, through a long familiarity with Russian literature, documents, and textbooks and through firsthand knowledge gained on his many trips to Russia, illustrates the central fact in Communist educational philosophy—that education is conceived of as a political weapon controlled by the Central Committee of the Communist Party and dedicated to the building of a Communist society—a dedication shown in the first rule of the official "Rules for School Children"—To strive with tenacity and perseverance to master knowledge, in order to become an educated and cultured citizen and to preserve most fully the Soviet Motherland." By comparison of actual texts, curricula, and examinations, Dr. Counts shows that the school has become an instrument of political and moral education. The Soviet system of education, in all its departments and forms, is charged not only with the inculcation of loyalties to country and Party, but also with the fixing of belief regarding the nature of the universe and the nature of man.

DREIKURS, RUDOLF. *Psychology in the Classroom*. New York 16: Harper and Brothers. 1957. 253 pp. \$3.75. In an area where the literature is often more confusing than helpful to the average teacher, this book performs an outstanding job of translating basic principles of psychology to direct and practical use in the classroom.

Dr. Dreikurs, an associate of Alfred Adler, bases his educational philosophy on the Adlerian approach that recognizes man as a social being, his actions as purposive and directed toward a goal, his personality as unique and indivisible. He also brings to bear the pertinent materials of group therapy, distinguishing precisely between the role of the teacher and that of the therapist.

The core of the book is a wealth of case stories of actual classroom situations involving various forms of child misbehavior. From these examples, and the author's wise and incisive comments on them, the teacher at every level of the school can enlarge his capacity to promote both learning and growth in the school. Parents, too, will find here invaluable guidance and a wide range of applications to their own relations with their children.

FRENCH, WILL; J. D. HULL; and B. L. DODDS. *American High School Administration, Policy and Practice*, revised edition. New York 16: Rinehart and Company. 1957. 616 pp. \$6. The authors have examined the first edition with a critical eye with the purpose of recognizing those sections that have been changed by new development, problems, and shifts in emphasis. The book is divided into six major parts, encompassing 26 chapters.

Part One is designed to provide students with some orientation for the high-school principalship. This position needs to be seen as one exercising executive functions shared in common with all executive positions in all large enterprises and institutions, both public and private. It also needs to be seen in relation to the whole of public education in the United States and in relation to the whole of youth education in the community. The authors believe that such orientation will help in the development of a better understanding and appreciation of the functions of the position than would otherwise be reached.

The importance of good personnel relationships to the effective operation of any organization is more clearly recognized now than ever before. Part Two deals with the principal professional relationships that must be maintained by the high-school principal. A good deal of stress is put on the democratic, co-operative quality of these relationships, since it is increasingly evident that, unless this quality pervades the whole area of professional relations, the staff-team will operate at much less than its best potential.

Since obviously the high-school's program of education is the basic reason for having such an institution, what the principal does to improve this program and to facilitate its operation are the most important aspect of his work. Part Three presents a broad concept of what the high-school's educational program really is, and then shows how high schools can be organized and operated to get the maximum out of the program in the way of growth and development of students. Beside the professional staff relationships dealt with in Part Two, the high-school principal also has the responsibility for developing and maintaining good pupil personnel relations and conditions. These are closely related to the school's educational program when it is broadly interpreted, as in Part Three. Part Four discusses the organization and administration of some of the principal aspects of the school that are directly related to student welfare and to students' educational programs. Without good policies and practices at points where the school's program and its administration directly touch the students, the work of the school can hardly be regarded as a success.

Part Five deals with an auxiliary, but very important aspect of the high-school principal's responsibility. It may be possible to have a fairly good educational program in a poor and badly operated school plant, but certainly it is not easy to do so. Good plant operation and management can improve the climate in which staff and students work. Helping to create the best possible physical setting for this work is a responsibility that no really competent high-school principal neglects. Another managerial responsibility which heads up in the principal's office is that of maintaining good working relations with other education agencies and institutions.

In Part Six the authors have assumed that a typical American community is intensely interested in its youth and its school and in itself as a place where its youth live and grow. Part Six, therefore, considers some of the community activities in which the school may take the lead. It also suggests some of the studies that the school and its students may undertake on the basis of which better plans can be made for the development of the community and its school. The high-school principal ought to be among the leaders in such a program of school-community betterment; certainly the quality of his suggestions and evaluations should increase the community's respect for him as a person, for the school he heads, and for public education as a means of sound social progress.

GARBER, L. O. *The Yearbook of School Law—1957*. Danville, Illinois: Interstate Printers and Publishers. 1957. 160 pp. \$3. This is the eighth

edition of the author's well-known and very popular book. Like its predecessors, it considers the most important cases dealing with school and education that were decided during a single year—July 1955 through June 1956. It contains eight chapters, each dealing with a particular phase of school law, and a ninth chapter which considers in some detail a few of the most significant cases decided during the past year. Added features in this issue include: "Legal Problems Involved in Bidding on School Building Contracts" by Charles M. Micken, Haverford School District, Havertown, Pa.; "Judicial Treatment of Juvenile Delinquency—Fiction or Reality?" by Marshall J. Tyree, Philadelphia Public Schools, Philadelphia, Pa.; and "Annotated Bibliography of Recent Studies in School Law" by M. R. Sumption, University of Illinois, Urbana, Illinois. Chapter titles are: Education and Government, School Districts and School Officers, School District Organization, Liability of School Districts, Officers, and Employees, School Property, School Finance, Teachers and Other Employees, Pupils and Pupil Services, and Particularly Significant Cases Decided During the Past Year.

GRAY, LILLIAN, and DORA REESE. *Teaching Children to Read*, second edition. New York 10: The Ronald Press. 1957. 485 pp. \$5.50. This book is organized into four parts: Part I highlights the important role reading plays in life and in school, discusses methods and reforms in teaching reading, shows the need for guidance in developing reading skills, and demonstrates the influence reading exerts on a child's adjustment, personality, and character.

Part II devotes itself to situations encountered before the child reads. It explains why the teacher should be familiar with a child's mental age for reading readiness as well as his physical, emotional, social, and experiential readiness. It tells the teacher how to apply the results of tests to teaching techniques and also how to select books and procedures to develop language, visual, and auditory skills, and mental readiness.

Part III details the basic program of reading instruction for elementary- and secondary-school children. In an overview of the basic program, the stages of a child's reading development, teaching techniques and their use in developing skills, and organization for instruction are treated. For each grade, the authors have included teaching and planning suggestions for conducting lessons and the reading program. Within these methods' chapters, there are many lesson plans which will be of help to the student teacher, as well as to the classroom teacher and reading supervisor, in carrying out the work for the twelve grades. Methods are recommended for teaching the retarded reader; for teaching silent, oral, and remedial reading; for working out a social studies and a recreational reading program; and, on the secondary level, for developing general reading skills and skills in eight subject matter fields. A separate chapter is devoted to word analysis and other word recognition skills, with a proposed sequential program in word attack, including phonetic and structural analysis.

Part IV treats additional aspects of the reading program. Remedial reading procedures are illustrated through the detailed reporting of a case study. Teachers can use many other techniques cited in the book in correcting reading difficulties. One chapter delves into content reading problems in geography, history, current events, arithmetic, and science and presents examples of lesson plans and activities for these subject matter fields.

The chapter on recreational reading delineates ways a teacher can guide a child's interests and tastes in literature and outlines ideas for a classroom book club and other activities to promote personal development. The problem of comic books and television in relation to recreational reading is discussed.

The book offers advice regarding the evaluation of the basic reading textbooks and workbooks and lists sources for recreational, dictionary, audio-visual, reference, and current materials. Appraising reading growth is the main theme of the concluding chapter, which discusses how to evaluate a lesson plan, how to evaluate instruction, how to appraise growth, and how to measure word recognition ability, vocabulary achievement, and tastes and interests.

The Growing Shortage of Scientists and Engineers. New York 3: New York University Press, Washington Square. 1956. 140 pp. \$4. The Thomas Alva Edison Foundation began with the organization of its first Institute in May 1951 to call national attention to the rising scientific and technological manpower needs in the face of the decreasing enrollment of students seeking careers in these fields. The Foundation has now held six Institutes at which eminent government officials, industrialists, educators, and scientists have worked together to determine what policies would enable the American community to solve these critical problems.

Toward development of necessary educational resources in elementary and secondary schools across the country, Institute participants have examined numerous existing pilot programs and have advocated new measures. The essential question remains, however, whether adequate measures will be applied within our communities soon enough to assure the the necessary trained skills for continuing economic development and for requirements of national defense.

America's educational system are governed by no one controlling authority. Decisions affecting science education are widely decentralized in America. Only a full understanding of the science education problems on the part of parents, business and labor leaders, school board members, teachers, guidance personnel, public officials, newspaper publishers, civic leaders, and many others will enable our children to seize the opportunities in sufficient numbers in science and engineering careers.

The Sixth Thomas Alva Edison Foundation Institute on "The Growing Shortage of Scientists and Engineers" on November 21 and 22, 1955, concerned itself with the latest information and proposals. Its contributors were drawn from all segments of American life whose daily concerns require them to be informed on the science education problem. They do not always reach the same conclusions, but their very differences point out the need for action, so that through the American tradition of experimentation solutions can be found.

HAIR, DONALD. *Tenure and Turnover of Wyoming Public School Superintendents.* Laramie: Curriculum and Research Center, College of Education, University of Wyoming. 1956. 100 pp. This is a report of a study of the tenure and turnover of public school superintendents in 89 school systems in the state of Wyoming over a nine-year period, 1947-55. Of the 208 superintendents holding this position during this period in these nine years, the average tenure was 3.2 years. In this period, 58 superintendents held the position only one year; 27, two years; 18, three years; 17, four years; 19, five years; 9, six years; 9, seven years; 6, eight years; and 45, nine years. Of this group of 208 superintendents, 106 were introduced to the superintendency for the first time during this period. The salary range of the superintendents in the position during the last year of the survey was \$3,000 to \$10,000; while the range of salaries of those who left for out-of-school jobs was \$1,000 to over \$20,000 on their new job. The five most frequently listed reasons given for leaving school work were, in order of rank (most frequently given reason listed first), salary too low, community pressure, school board difficulties, insecurity, little opportunity for advancement, and superintendent's health. During this nine-year

period, 126 of the 208 in these 89 school systems changed to other types of work. About 20 per cent of the schools employed new superintendents each year during the nine-year study.

HALL, C. S., and GARDNER LINDZEY. *Theories of Personality*. New York 16: John Wiley and Sons. 1957. 584 pp. This volume give a readable picture of the major theories of personality. The author's work is of central interest to everyone concerned with psychology and personality theory. Each of the theories presented is discussed in an expository manner. The theory is left to speak for itself. In addition to presenting each theory, a useful account is given of some of the empirical work which has been stimulated by that theory. This factual material helps to vitalize the purely theoretical discussion, and to point out the utility of the theory. The authors have included an introductory chapter on the nature of personality theory, thus providing a general orientation toward the subject. The final chapter offers a summation and comparison of the various dimensions of all the theories.

HARING, D. G. *Personal Character and Cultural Milieu*. Syracuse 10: Syracuse University Press, Box 87, University Station. 1956. 844 pp. \$7.50. This compilation stresses anthropological data. This is not a book of readings as much as it is a collection of papers that the compiler desired to place in the hands of students. Four articles are published here for the first time—articles by Margaret Mead, Edward and Margaret Norbeck, Ronald L. Olson, and Betty B. Lanham. The book is divided into two parts. Part I, essentially introductory, presents concepts, goals, and field techniques of anthropology plus a discussion of social research in relation to scientific method. Part 2 is the book—a series of papers that present varied data and interpretations on the common theme of culturally fostered patterns of personal character. A general bibliography is included which aims to be inclusive rather than selective.

HARRIS, A. J. *How To Increase Reading Ability*, third edition. New York 3: Longmans, Green and Company. 1956. 655 pp. \$5.25. Although every chapter has been revised and extensively rewritten, four topics have been expanded so much as to require an additional chapter each. The general survey of the reading program now occupies two chapters. The vital question of how to meet individual and group needs has been greatly amplified, and the author has attempted to provide a clearer and more detailed description of individualized and group techniques than has hitherto been available. Discussion of the causation of reading difficulties has been greatly enlarged, especially in regard to visual problems, directional confusion, and personality, and a new theory on the significance of hand and eye dominance in relation to reading disability is presented. The centrally important question of how best to develop word recognition skills now occupies three chapters, the first two discussing in detail the developmental program in word recognition and the third covering remedial practices.

One former chapter, "Teaching Reading to Specially Handicapped Children," has been dropped. The author felt that it was not possible to treat the special needs of such groups as the mentally retarded, the hard of hearing, and others with sufficient adequacy in just a few pages each. With four additional chapters and one deletion, the number of chapters has increased to nineteen.

The listings of helpful materials and references have been enlarged and brought up to date. These include descriptions of tests and equipment, word lists, bibliographies, workbooks, and games and teaching devices included at appropriate points. The appendixes have been thoroughly revised. Appendix A provides an alphabetical descriptive listing of all tests mentioned in the book.

Appendix B consists of a graded list of books recommended for poor readers, with special symbols identifying books of exceptional appeal or secondary-school interest.

This new third edition has been thoroughly revised, considerably enlarged, and completely reset in a new format. The revision should be useful not only in graduate courses in developmental and remedial reading, but also in undergraduate methods courses, and helpful to the classroom teacher and the reading clinician. The book includes discussion of differing points of view, and contains practical applications with specific materials.

HAVIGHURST, R. J., and B. L. NEUGARTEN. *Society and Education*. New York 11: Allyn and Bacon. 1957. 483 pp. \$5.75. This book examines the place of the educational system in the society it serves. The American school system performs two essential functions. First, by interpreting and transmitting the values of society and by helping children to take their places as participating members, the school has the function of inducting the child into his society. Second, by promoting the ideals of the society and by helping children to make their maximum contributions to the community, the school has the function of improving the society.

To understand how the school performs these two functions, we look, on the one hand, at the society itself—its structure and its organization—to see how the school acts as its agent. We look, on the other hand, at the child, to see the general process by which he becomes a member of a social group, and to see how the school influences that process. The society, then, and the child growing up in the society constitute the reference points for our examination of the educational system.

In Part One, introductory material of two types is presented: first, in Chapters 1 and 2, the general outlines and the structure of American society; then, in Chapter 3, the processes underlying social development and the formation of social loyalties in the child. In Part Two, one considers the social environment of the child and the adolescent viewed from the standpoint of the major social influences that operate upon him—the family, the peer group, and various community institutions—seeing how each operates within the broader social setting and how each relates to the school.

Part Three focuses upon the school as a social institution. One looks first at the school as a self-contained social system, then at the school in relation to the local community. Enlarging the perspective, the school is considered in relation to the social structure of America and the international setting. Part Four deals with the teacher as the crucial person in the interaction between child, school, and society.

A sociological interpretation of education is bound to involve the discussion of controversial issues and also matters that require value judgments. Although these matters have been presented factually to allow the student to arrive at his own conclusions, we have nevertheless felt it necessary to express our own values in certain areas where the problem of education is a philosophical rather than a scientific one. For instance, in Chapter 12, "Education and Social Policy," we have undoubtedly made certain value judgments with which not all our readers will agree. The same is probably true in Chapter 14, "Intergroup Education and Social Integration," and in Chapter 15, "Education in the International Setting."

HERRICK, J. H.; R. D. McLEARY; W. F. CLAPP; and W. F. BOGNER. *From School Program to School Plant*. New York 17: Henry Holt and Company. 1956. 496 pp. \$6. The current schoolhousing problems cannot be solved

by boards of education or superintendents of schools or architects or school-plant specialists alone. There are no magic fountains from which will flow the needed foresight and ingenuity, let alone the money, to do the job that is necessary. Effective solution of the problem requires clear understanding and intelligent participation by laymen, architects, and professional educators alike—by teachers and custodians and school cooks and the man in the street as well as by superintendents of schools and members of boards of education.

No one publication can serve the needs of so diverse a group. In writing the present volume, the authors have had in mind graduate students in educational administration, practicing school administrators, and school-plant consultants as the principal readers. They aim to give these persons a basic understanding of the goals to be achieved and of the problems to be employed in planning, an appreciation of the role that architects and other designers play, and a basis upon which they can reach decisions and give approvals as required.

For the architect and other designers or prospective practitioners in these fields the major purpose is to clarify their role in the larger educational setting. An effort is made to strengthen the case for thorough educational planning and at the same time to support excellent practices in architecture and design.

In preparing this book, the authors have drawn from their experiences such materials as seem to them most likely to be useful in understanding the scope and complexity of the problems involved. The text points occasionally to examples of the wrong approach to the building of schools and begins with a statement on the consequences of hasty planning. The unfortunate cases referred to occur in a multitude of variations in an untold number of cities and towns. This may be partly because the building of a school is a new experience to many persons who carry responsibilities in the planning process. With the pressure to provide adequate housing for the pupils of a growing population and rapidly developing new communities, the danger of hasty action and inadequate planning increases. To prevent mistakes, to avoid pitfalls, and primarily to offer guidance through all the steps that lead from the formulation of the school program to the completion of the school plant, this book was written.

HUGHES, J. M. *Human Relations in Educational Organization*. New York 16: Harper and Brothers. 1957. 437 pp. \$4.50. This is a basic textbook in personnel administration. It is the author's point of view that problems of personnel relations are not the responsibility of the administrator alone, but concern the entire personnel. The book is, therefore, directed to any member of an educational personnel working at any level of education.

A sound theoretical base is established in the first four chapters to provide an understanding of organization and to furnish an interpretation of the role of the individual. This is followed by two chapters dealing with the individual in terms of his attitudes and personal adjustment to the organization and three chapters focusing attention on the effect of the use of organizational techniques on personnel relations.

This is a handbook of psychological, sociological, and philosophical backgrounds for an understanding of personnel relations suitable for a basic or supplementary text for use in any course in personnel relations. It is sufficiently comprehensive to form the core text for an entire introductory course in personnel relations or a general course in personnel relations designed to meet the wide interests of the personnel including those who are non-administrative. A theoretical base is fortified with applications of general interest and use. Footnotes direct the reader to material bearing directly on

the subject treated. Bibliographical material furnishes references for a current study of any of the problems included.

JERSILD, A. T. *The Psychology of Adolescence*. New York 11: Macmillan Company. 1957. 452 pp. \$5. This book, for those who are seeking to understand adolescents, is written for students, teachers, and parents, for young people who are still in the adolescent period of growth, and for older persons who wish to inquire into the bearing of their own adolescence on their lives as adults.

The author has endeavored to merge into one continuous account the contributions from two sometimes overlapping and sometimes quite distinct approaches to psychology. One approach, as applied to adolescence, has centered on norms of development, the architecture of growth, description of behavior, and measurement of traits and abilities, emphasizing mainly what is overt and objective. Another approach has dealt with the subjective aspect, the "inner life," and the dimensions of the self, inquiring into the nature of the adolescent's personal experience of his own existence.

In its organization, much of this book follows the usual pattern, with chapters devoted to various aspects of physical, motor, intellectual, social, and emotional development. Early in the book he has included a brief chapter dealing with the concept of the self, partly to set forth some ideas that will recur in later chapters and partly to introduce this concept to students who have not previously become familiar with it.

In the discussion of mental growth he has included a separate chapter on adolescent day dreams, fantasies, and dreams. The emotional life of the adolescent is considered in several chapters and sub-sections of chapters, including sections dealing with the roles of love, hostility, and anxiety in influencing the attitudes that are involved in the interplay between acceptance of self and others. In a section on the meaning of emotional maturity, the author develops the concept of compassion and the idea that the emotionally mature adolescent is not one who simply has learned to be prudent in controlling his emotions but one who has the freedom to draw upon his emotional capacities.

In dealing with emotional and social development, he has touched upon some of the dilemmas that face the adolescent in the society in which he lives and within himself as he seeks to find a healthy balance between conformity and self-direction, between the need to live his life according to external standards of adjustment and the need to acquire convictions and commitments of his own.

In dealing with this theme, and in the discussion of moral development and the meaning of religion in the life of the adolescent, the author has taken the position that, to understand the adolescent, to guide him, and to appreciate the nature of his personal experience, it is necessary to face questions of meaning and value that are not solved simply by making an inventory of facts concerning what is the norm.

A final chapter discusses personality development and self-fulfillment. In this he has summarized some of the main currents in the life of the adolescent, the problems he faces, and the resources on which he can draw in acquiring realistic attitudes of self-acceptance that will help him to face the future in a healthy way.

JERSILD, A. T. *When Teachers Face Themselves*. New York 27: Bureau of Publications, Teachers College, Columbia University. 1955. 181 pp. \$3.25. This book is concerned with the strivings, satisfactions, hopes, and heartaches

that pervade the teacher's life and work. Written for teachers, it is one of a series of writings carrying the theme that education should help children and adults to know themselves and to develop healthy attitudes of self-acceptance. Based in part on a study of over a thousand teachers and students in education, in part on theoretical contributions of developmental psychology, psychoanalytic psychology, and philosophy, the book discusses concerns teachers feel they must face in their personal and professional lives if they are to help their students in the search to find themselves.

KELTNER, J. W. *Group Discussion Processes*. New York 3: Longmans, Green and Co. 1957. 383 pp. \$4.50. Recent years have been marked by a revival of interest in discussion. This new emphasis brings with it an additional interest in the process of discussion as a vital matter in many forms of group life. A significant factor in this renewed interest is the contribution of various disciplines to an understanding of what goes on when people discuss. The author attempts to present the trend of theory and practice in discussion methods. The principles and techniques presented are taken from experience and research. He warns however, that there is no magic in these matters. He states that there is no way to learn discussion, it must be through practice. He has, in this book, endeavored to go beyond mere recital of techniques, so that the basic principles of techniques may be understood. The advance students may use the book as a guide for study and research. For the person who wants help for conducting meetings, there are many practical suggestions. And, finally, for the teacher of discussion, the book contains numerous aids for guiding his students.

KENWORTHY, L. S. *Introducing Children to the World*. New York 16: Harper and Brothers. 1956. 280 pp. \$3.75. The theme of this book is expressed in an opening quotation: "The elementary schools that will make the greatest contribution to life in the next generation will be those schools that are related to the world community, yet are firmly anchored in their home communities." Believing that the most urgent task of the school today is that of educating children to awareness of our interdependence with the rest of the world, the author here outlines methods and materials for teaching children these realities. His procedures are organized as to grade, beginning with kindergarten and proceeding through junior high-school level.

The author has selected ten basic themes which should run through the teaching curriculum from nursery school through the ninth grade. Each of these topics is approached from the viewpoint of aims, suitable experiences, and resources for the various grade levels. The book also includes descriptions of promising practices in this country and abroad. There are extensive indexes providing materials for teachers, resources for children, and addresses of organizations, publishers, embassies, and other groups. This book will be valuable to all teachers and school administrators as the first such comprehensive work to establish a broad program for elementary and junior high-school teaching in this vital field.

MAIER, N. R. F.; A. R. SOLEM; and A. A. MAIER. *Supervisory and Executive Development*. New York 16: John Wiley and Sons. 1957. 342 pp. Experience with human relations training and executive development programs has shown that merely learning the principles of human behavior has little value unless it is also supplemented with skill practice. Here is a book which provides an opportunity for this practice in two essential ways. First, it offers challenging, realistic material for role playing. This marks the first time that industrial conflicts have been presented in the role-playing format. Second, the

volume is a carefully planned casebook in human relations—one which will stimulate the discussion and analysis of critical issues.

About half the cases in the book illustrate principles in management leadership, conference skills, ways of recognizing and dealing with feelings, and problems in group settings. The remaining half illustrates principles of effective relations and mutual understanding between individuals.

The volume can be used as a training manual for supervisory and executive training. It requires no highly skilled leader. It can also serve as a training manual for a group of persons who wish to form a study group and have no designated trainer. In addition, the material is presented in such a way that it can be read by a single individual and serve to give him the experience of solving problems with a group.

MARTIN, T. D. *Building a Teaching Profession*. Middletown, New York: Whitlock Press, Inc., 18 Montgomery St. 1957. \$3.50. This book is neither a scientific treatise nor a scholarly history of either the National Education Association or the teaching profession. It is a brief, personal, inside story about the contributions which the NEA and our state and local teachers associations have made toward making teaching more attractive and more effective. Teaching is older than our professional associations, but it has not always been rated as a profession. However, for more than a century, leaders of vision, working cooperatively, have been building it into a profession.

The book is composed of 26 chapters titled as follows: The Purpose and Program of the National Education Association, The Most Important Profession, Progress Toward Professional Status, Teachers as a Social Force, Three Black Eyes, The Best Job in the World, Early Impressions, The Old Chief, A Significant Symbol, The New Chief, The NEA Setup, NEA State Directors, Membership Promotion, Special Services, State Teachers Associations, State Secretaries, Local Teachers Associations, Presidents of the NEA, Geniuses and Near Geniuses, Professional Ethics, Teachers Unions, Repeal of the Little Red Rider, Our Schools Are Not Godless, Are Private Schools a Menace to Our Democracy?, A Century of Progress—Achievements and Goals, and Increased Services and Leadership. As teacher, principal, executive secretary of the Utah Education Association, 1924-25, and Director of the NEA Membership Division, 1925-50, the author has a background for writing a book of this type that few if any have.

MERCER, B. E., and E. R. CARR. *Education and the Social Order*. New York 16: Rinehart and Company. 1957. 601 pp. \$6. This volume of readings is the result of a cross-disciplinary approach to the study of social aspects of the educational process. Studies included here were chosen primarily for the light they throw upon persistent and troublesome questions about education and the agencies through which it is provided. Some of the most significant contributions of anthropologists, psychologists, sociologists, and educators are presented here, along with thought-provoking statements by theologians, journalists, and others concerned with what goes on in the schools.

The theme of this book is that education is a social process, and only if it is studied as a functioning part of the whole complex of human behavior that we call social life can education be guided in the interest of whatever goals a citizenry aspires to. Accordingly, we seek to present the best that is known about such topics as the school itself and the relations between education and the total socialization process, education and social stratification, disorganization and change, and the roles played by different individuals in the educational process. Part One of the book deals primarily with descriptions of these

relations and theories about them, not only in America but in other societies as well. Part Two is concerned almost solely with the nature, functioning, and problems of American education and educational institutions. The final chapter presents a program for the development of a vigorous sociology of education which, not bound by artificial limitations to one discipline or another or by commitment to the solving of specific political or ethical problems, bids fair to make scientific contributions to both sociological and educational theory. This book is presented as one source for the development of such theory. But the major purpose of the volume is to serve as a source of information for students in education, sociology, and other fields who are concerned with understanding education.

MEYER, A. E. *Education for a New Morality*. New York 11: Macmillan Company. 1957. 107 pp. \$2.50. The author's aim in this book is to heal the gap in thinking between science and humanism, and to contrast the earlier society which was primarily rural with the new urban industrialism which is less closely related to the natural environment and has become more dependent upon effective human relationships and a well-ordered social structure. She sees the "cold war" of the future shifted from a "competition in arms" to a "competition in brains" and so, a "war being fought in the classrooms of Russia and America." Scientists technically trained there must be, but atomic scientists also are now increasingly conscious of their role as citizens. On their part humanists must recognize that modern science is not only materialistic, but also the acme of things deeply democratic and humane.

In treating her main theme, she introduces many of our most significant problems: free will and determinism, the conservatism of the reactionary theologian, sectarianism, materialism, the scientific method of thinking; human freedom, and advent of "the second industrial revolution." "The real scientific revolution is still to come," and a global philosophy and morality must be sought. "Science is the most successful organ of social progress," she concludes.

MINER, J. B. *Intelligence in the United States*. New York 10: Springer Publishing Company, 44 East 23rd Street. 1956. 192 pp. \$4.25. The theory of intelligence, as formulated by the author, postulates that native intelligence depends for its development on the availability of learning opportunities and on individual motivation. The theory is employed in a nation-wide survey of a representative sample of the U.S. population; methods of public opinion research were used in administering the intelligence test, a brief but highly reliable measure of verbal ability. The 1500 persons tested match the U.S. population aged ten and over. The author investigates the significance of their intelligence scores in relation to education, sex, marital status, age, race, occupation, geographical area, religion, class identification and city size.

An original contribution of the book is the formulation of models of the educational system and occupational structure that permit detailed estimates of the extent to which intellectual resources are being wasted in this country. Suggestions for full use of these resources are made throughout the book and, especially, in the concluding chapter.

REMMERS, H. H.; H. N. RIVLIN; D. G. RYANS; and E. R. RYDEN, editors. *Growth, Teaching, and Learning*. New York 16: Harper and Brothers. 1957. 569 pp. \$4.50. The similarities and differences of learners in their various relevant dimensions and their implications for healthy growth—intellectually, emotionally, and socially—are the lines that have guided the selection of the content of these readings. Helping individual boys and girls to develop fully their potentialities and to become useful and desired members

of society demands the kind of knowledge that the behavioral sciences are providing.

Included in this kind of knowledge is an understanding of the origins of the pupil and the kind of social heritage he brings with him to school. The family from which he comes already will have functioned and will continue to function as a basic educational institution. Attitudes and value systems as well as intellectual skills and capacities come to school as dimensions of the pupil. The notion of a not-so-distant past that the learner is only a kind of cognitive machine acquiring knowledge and skills, important as these are, is in modern education thoroughly obsolete. Phylogenetically the autonomic system is millions of years older than the central nervous system. The affective and the cognitive dimensions functioning in a society are determiners of the roles that the individual will play on the stage of life for which education is a preparation.

The teacher, too, is a learner whose dimensions and roles are similarly determined. Hence his value systems and competencies are of concern. While our selections of readings focus primarily on the pupil, the teacher's orientation to pupils has been one of our important guidelines. Healthy personality growth of children is an important function of teacher personality.

The curriculum as a means, a vehicle, is obviously also of major concern. Hence the authors have included several selections focused on it. The selections written by many different authors naturally vary greatly in style and difficulty. The teacher of prospective teachers in the courses in which this book will be used will play an important part in clarifying the meanings of an occasional somewhat technical article. In the main, however, the authors have kept in mind the beginning undergraduate in a teacher-training program and have tried to select content as simple and usable as possible.

The advantages of a book of readings in the current scene are several and obvious. Library facilities in colleges and universities are not sufficient to provide a diet of professional journal articles for large numbers of students even if the teacher wished to organize a course in these terms. Moreover, the student, by being exposed to varying points of view, is more likely to learn how rather than what to think. Costs of instruction are minimized by this approach. And, finally, some of the selections will be nearer in time than any textbook could otherwise make them.

SARGANT, WILLIAM. *Battle for the Mind*. New York 22: Doubleday and Company. 1957. 263 pp. If the author's purpose in writing this book can be summed up in a single question, it is: "What have evangelists, psychiatrists, politicians, and medicine men in common when they succeed in changing your beliefs and behavior?" The author is now physician in charge of the department of psychological medicine at one of England's oldest and best-known medical schools. For many years he was on the staff of the Maudsley Hospital in London, England's postgraduate psychiatric teaching and research center. He is present president of the section of Psychiatry of the Royal Society of Medicine, and also registrar of the Royal Medico-Psychological Association.

In 1938-39, he spent a year on a Rockefeller Traveling Fellowship at Harvard, where he was Research Fellow in Psychiatry. He returned to England at the outbreak of the war and spent the war years in research and treatment of battle neuroses and other special war problems. In 1947-48, he was invited to become Visiting Professor of Neuropsychiatry at Duke University. Altogether he has visited or worked in the United States on four different occasions in the past eighteen years.

SHAMOS, M. H., and G. M. MURPHY, editors. *Recent Advances in Science: Physics and Applied Mathematics*. New York 1: Interscience Publishers, 250 Fifth Ave. 1956. 396 pp. \$7.50. A problem facing scientists for more than a generation has now reached major proportions and threatens to stem the tide of the necessary flow of knowledge: How is it possible to keep abreast of developments in one's own field, as well as being aware, if only through mental osmosis, of development in peripheral realms? The problem is further complicated. Each expert speaks a language probably meaningful to the few who are likewise expert in that field. But could not the engineer, chemist, or solid state physicist profit significantly from a knowledge of the work done by the mathematician or the nuclear physicist? Is there a common methodology that would bear fruit in all of the physical sciences?

In terms of this thinking, it is eminently clear that an educational and training need exists. To meet this need, the Division of General Education of New York University, with the co-operation of scientific leaders from industry, government laboratories, and the University, developed a series of co-ordinated lectures by the outstanding men in scientific fields of current interest to industry, research laboratories, and the universities.

The First Symposium on Recent Advances in Science was held at Washington Square during the spring of 1954. It attracted 225 men and women from metropolitan industries and faculties. This book, an outgrowth of that Symposium on applied mathematics and physics, is a contribution to the fundamental understanding of the important work explicated by the several lecturers. It is obvious that both the Symposium and this book have required a large degree of active co-operation and participation from many different sources.

SISTER MARY INNOCENTA MONTAY. *The History of Catholic Secondary Education in the Archdiocese of Chicago*. Washington, D. C.: Catholic University of America Press. 1953. 450 pp. \$4.50. This study traces the growth and development of Catholic secondary education in the Archdiocese of Chicago from the beginning to the present. Important phases of secondary schools—the history, students, staff, programs of study, activities program, types of schools, buildings, administration, supervision, financial support, and agencies affecting the schools—have been treated. Specifically, the purpose is to present a history of individual schools rather than that of a system since the high schools, established as independent institutions by various religious communities and local parishes, have not been organized into a secondary-school system.

With the increase in the number of schools and students, the need of a more closely knit organization became apparent. Consequently, several associations, including principals as well as teachers of various departments, have been organized to discuss common problems relating to administration, curriculum, and extracurricular activities. Independent in organization and administration, secondary schools of the archdiocese share in a large measure the advantages of regular central or diocesan high schools of the country.

The present study embraces Catholic academies and high schools located within the jurisdiction of Chicago and which, until 1857, was coextensive with the boundaries of the State of Illinois. Schools originally in its jurisdiction but which, upon the erection of a new diocese, fall within the territorial limits of the latter, no longer form part of the history of the Archdiocese of Chicago. Consequently, the progress of these schools following their transfer to another diocese has been given only brief treatment.

The plan of the study is as follows: Chapter I gives the historical development of Catholic education in the Archdiocese of Chicago; Chapter II treats of the nonparochial academies and high schools for girls; Chapter III discusses the nonparochial academies and high schools for boys; Chapter IV presents parochial secondary education from 1855 to 1916; Chapter V deals with further development of parochial secondary education from 1916 to 1952; Chapter VI considers other types of secondary schools; Chapter VII covers the present status of Catholic secondary education in the Archdiocese of Chicago; and Chapter VIII is a summary of the results of the investigation.

STACEY, C. L.; and M. F. DeMARTINO, editors. *Counseling and Psychotherapy with the Mentally Retarded*. Chicago 13: Free Press, 1005 W. Belmont Ave. 1957. 478 pp. \$7.50. This volume will meet the practical needs of those people concerned with the psychological treatment of the mentally retarded and their parents. Also, it will help parents obtain a better understanding of some of their underlying attitudes, feelings, and conflicts in regard to their own retarded children. This book is devoted exclusively to the problem of counseling and psychotherapy with the mentally retarded and their parents. It brings together in convenient form the basic materials on the subject—representing the careful research of the foremost experts in this area—that have heretofore been available only in widely scattered sources.

The papers in the introductory part discuss the *pros* and *cons* of psychotherapy with the mentally retarded, and the remaining parts contain papers dealing with various therapeutic approaches of a positive nature. The final part, written by Mr. DeMartino, is based primarily on clinical and psychotherapeutic experiences with mental retardates and their parents. The selections deal with a number of types of therapy, such as individual, group, play, psychoanalytic techniques, psychodrama, and speech, vocational-occupational, and industrial therapy. There is also a section which highlights the tremendous significance of the role of parents of retarded children in the over-all problem of psychotherapy.

STODDARD, A. J. *Schools for Tomorrow: An Educator's Blueprint*. New York 21: Fund for the Advancement of Education, 655 Madison Ave. 1957. 62 pp. The areas of the educational program discussed in this report are: the present and impending teacher shortage, its causes and implications, and what is being done to meet it; raising the level of teacher effectiveness; adapting present and new school buildings and other facilities to meet impending changes in methods and procedures; and the use of television as an integral part of the instructional program at all levels.

Much of what is included in this statement grew out of conferring with superintendents of schools, school board members, school staffs, teachers, college deans and their staffs, with state school officers, and citizens generally, in more than seventy cities over the United States. Also, help came from visiting many of the existing educational television stations, as well as commercial stations carrying educational programs, and from reading much of the literature bearing on the areas of interest, especially educational television.

THOMPSON, H. M. *Swierl*. New York 1: Vantage Press. 1956. 163 pp. \$3.50. *Swierl* is a made word, meaning *communications unlimited*. Each letter stands for one or more important habits of mind and conduct that *must* be developed if a child is to learn to read successfully . . . to overcome the communications problem that causes his parents such concern. And *Swierl* stands for a definite, positive plan.

Measured by the standards of most people today, a child is considered pretty successful in school if he can read. Since reading establishes status in our society, the child who *cannot* read carries a stigma, the result of which is a complexity of problems for him, the author points out.

This book enumerates the diverse problems that develop both at home and in school because a child is backward in learning to read. Basing her findings chiefly on her experiences as head of the Thompson Reading Clinic, in Anaheim, California, the author gives concrete data—case histories and the methods used to solve each problem. Fundamental, the author says emphatically, is *co-operation between parents and teacher*.

Swierl does not stop there. Its concept embraces the *total* development of the child . . . his whole personality, and the best possible environmental attitudes for him as he sets out to acquire reading and other habits properly related to worthy community membership.

TIEDEMAN, D. V., editor. *Teacher Competence and its Relation to Salary*. Cambridge 38, Mass. New England School Development Council, Spaulding House, 20 Oxford Street. 1956. 272 pp. \$3.50. This is the final report of a nine-year study by the Merit Salary Committee of the New England Development Council (NESDEC). The report presents a new method for the determination of teachers' salaries based on competence.

The Merit Salary Committee considered a reappraisal of the teacher salary structure imperative at this time because of the existing shortage of teachers, the relatively low level of teachers' salaries, and the increasing importance of attracting and holding well-qualified people. The committee believes that the adoption of its report will contribute to raising the professional status of teaching. The salary schedules and the method of administering them, as contained in the report, come more closely into balance with the responsibilities which professional teachers discharge.

The merit salary report analyzes the preparational-and-position-type salary schedules currently in use, and then proceeds to the merit salary concept. The Committee recognized that a teacher serves many publics and it concluded that the pupils, the school system, and the profession had a just claim on the teacher's work. The Committee then borrowed the sociologist's concept of role and suggested that the teacher had a classroom, a school, and a professional role to perform. Merit, in the Committee's report, is determined by the ability of the teacher to serve in the three roles. The merit salary schedule, proposed by the Committee, begins at \$3,400 a year and reaches \$8,900 as the teacher achieves maximum professional competence. It is estimated that the teacher will achieve a satisfactory classroom level within three years, and that the competent teacher should progress to the school role in the eighth year and the professional role by the thirteenth year. The proposed merit salary schedule can include increments based on each successive year of service, but the Committee favors a single salary for each role. Thus, for the satisfactory performance of classroom role, the teacher would receive \$5,900 a year, for school role \$7,400, and professional role \$8,900.

The Committee's report describes how promotion would work in a merit salary system. The advancement by the teacher from one role to another would depend on a favorable vote of an evaluation committee, comprised of three teachers, three administrators and one school committee member. The evaluation committee, especially selected for each case, would review the individual teacher's work and accomplishments, confer with and interview the teacher, and submit recommendations in regard to advancement to the School Committee.

Evaluation would ordinarily come at the end of the third, eighth, and thirteenth year. The teacher himself with the encouragement of the administrative staff would be expected to apply for evaluation and advancement.

The report reviews the reactions to the merit system where it has been introduced or proposed, and considers, in some detail, the New York State experience where the merit system was adopted in 1947 and subsequently abandoned. NESDEC questioned approximately 3,000 teachers in member schools on attitudes toward a merit system. The majority favored evaluation of their performance, but rejected the concept of salary increases dependent on evaluation.

WEBB, H. V. *Community Power Structure Related to School Administration*. Laramie: Curriculum and Research Center, College of Education, University of Wyoming. 1956. 100 pp. In this survey the author attempts to devise a method which the school administrator can use to study the community and to identify community leaders or opinion makers. The author makes a study of three Wyoming communities and reports his findings in this publication. Information which appears in this report should alert the young superintendent, as well as the prospective one, to the advisability of acquiring the necessary "know-how" and sensitivity to the factors which promote or destroy the proper working relationships with people who make decisions that directly affect the schools of the community. A thorough understanding of the methods which should and can be employed to ascertain a community's power structure should lead to more effective administrative leadership.

WITTICH, W. A., and G. H. HALSTED. *Educators Guide to Free Tapes, Scripts, and Transcriptions*, third edition. Randolph, Wisconsin: Educators Progress Service. 1957. 202 pp. \$5.75. This is the annual edition of a professional, cyclopedic service on tapes, scripts, and transcriptions. This edition is completely new and is devoted exclusively to free tapes, free scripts, and free transcriptions. It is a complete, up-to-date, annotated schedule of audio aids and scripts—bringing the compiled information on these *free* educational materials, all within the covers of a single book. It lists, classifies, and provides complete information on sources, availability, and contents of 57 free tapes, 177 free scripts and 96 free transcriptions, a total of 330 valuable materials. Additionally, it gives the busy, alert educator and librarian information on the nature, purposes, and use of these materials not to be found in any other single source.

Dr. Walter A. Wittich adds another to his popular series of significant articles on contributions of free audio materials to education. It is entitled, "Audio Materials for Learning."

This Guide is designed as a companion publication to other widely used services; namely, *Educators Guide to Free Films* and *Educators Guide to Free Slidefilms*. For educational as well as financial reasons, the many fine audio, visual, and other materials available from industrial, government, and philanthropic organizations have rendered and continue to render a valuable contribution to the curriculum.

Books for Pupil-Teacher Use

ADAMS, ANDY. *Why the Chisholm Trail Forks and Other Tales of the Cattle Country*. Austin 12: University of Texas Press. 1956. 328 pp. \$4.50. Among the most charming features of the Log of a Cowboy are the stories the cowhands tell around the fires at night when the day's work is done. Similar and equally engrossing stories are scattered throughout several other

less successful novels, long out of print, while others that never saw publication at all have been found among Adam's papers.

In the present book, Wilson M. Hudson has gathered together these tales of the trail and camp into one volume that surely will delight the hearts of all readers who are interested in the old West and the men who made it. Every aspect of range life is touched upon in these tales, each told by an Andy Adams character, but all derived by the author from the many hundreds of nights he himself spent under the Western stars listening to the talk of men as they sat around the fire.

ADAMS, ANSEL. *Artificial-Light Photography*. New York 17: Morgan and Morgan, Inc., 101 Park Ave. 1956. 128 pp. \$3.75. The author shows full details for a dramatic personal approach to artificial lighting. This Basic Photo Series Book 5 has eight main sections and includes 55 illustrations. The author expands his concept of the zone system and previsualization of the final print to the making of pictures by both flood and flash illumination. He emphasizes throughout that it is the cameraman's *thinking*, not his equipment, that matters. As proof of this contention, the book opens with a magnificent portrait of Charles Boyer, made with just a single flashlamp.

By continued concentration on thought and visualization, the author avoids the usual pitfalls of "formula" lighting. Step by step, with abundant pictures to illustrate each point, he leads the reader to an understanding of artificial light and how to use it. At the same time, he never imposes his own concepts on the reader, who is always left free to develop his own personal interpretation of a picture even while attaining a technical mastery of his medium. The book explains exposure measurement, film speeds, filters, and useful terms. Lighting units—tungsten, flash, and speedlight—are explained with suggestions on how to evaluate them for individual requirements.

In the section of applications of artificial light, the author includes extensive coverage of interiors, scale, painting with light, backgrounds, progressive lighting, light sources in the image, polarized light, photographing glass, transparent and translucent objects. Many original ideas are introduced in this and other sections, including the use of the Polaroid process for lighting tests, and how best to photograph action under artificial-light conditions.

The portraiture section delves into a prolific and highly absorbing discussion of environmental pictures, basic lighting plans, light balance, flash, problems of color and texture, essential retouching. The author brings forth his practical insight and technical mastery in the copying section. He describes equipment, proper and improper methods of copying Polaroid prints, transparencies and negatives, paintings, Daguerreotypes, etchings, lithographs, drawings, maps, typography, sculpture, metals, and other objects.

ANSTRUTHER, IAN. *Dr. Livingstone, I Presume?* New York 10: E. P. Dutton and Company. 1956. 221 pp. \$3.95. The famous greeting in the heart of Africa with which Henry M. Stanley met the noble missionary explorer is closely bound up with the fame of both men. Yet the phrase which caught the popular imagination plagued and haunted Stanley for the rest of his life. The author of the present biography divides his book into two parts: first, "The Triumph" and then, "The Disaster." In the first part the full story of Stanley's early life is presented, culminating in his search for Livingstone. The remarkable exploits which followed were, however, accompanied by the bitterness and jealousy and the ridicule which dogged Stanley's steps.

In 1869 came the commission from James Gordon Bennett, Jr., of the New York Herald, to seek out Livingstone who had disappeared into the depths of

the African jungle. Later Stanley traced the Congo to the sea and founded and governed the Congo Free State. Hero of England, he became in the popular mind the prototype of all those remarkable men of the nineteenth century who explored the Dark Continent. Yet he was hounded by the jealousy of the Royal Geographic Society and the frank disbelief of many people in his most famous exploit. Years of bitterness followed but he continued his writing and exploration and eventually was knighted by Queen Victoria.

ARMSTRONG, W. H. *Study Is Hard Work*. New York 16: Harper and Brothers. 1956. 183 pp. This book has been written to give the student aid in learning how to study. It is composed of 14 chapters discussing various aspects involved in a successful study program. The author, following his introductory chapter, discusses in succession the desire to learn, using the tools, putting ideas in order, developing a vocabulary, getting more from what you read, written work, what books are, acquiring skill in study, interest and motivation, learning to listen, taking notes, reviewing for tests, and taking tests.

ASSOCIATES, M. E. *Complete Home Improvement Handbook*. New York 36: McGraw-Hill Book Company. 1957. 1,023 pp. \$5.95. This is an entirely new kind of basic home reference book—a fact-book of materials, tools, equipment, and methods. It is more than a "How-To" book. It is a "What-To-Use" book and a "How-To-Use-It" book, a practical and usable guide to every phase of home care and improvement.

Here is a one-volume library of useful information that should stand beside the dictionary and the cookbook on every home reference shelf. In its more than 1,000 fact-packed pages, it lists, describes, and illustrates thousands of materials, tools, and accessories regularly bought and used in the home; it tells accurately and specifically what they are, what they are made of, what they will do, where and how they can be used; it gives the correct names, sizes, grades, qualities, and specifications; it helps pick the best product for a particular purpose and conditions of work; it shows the easiest and best methods of installation, use, and maintenance; and saves time and money because it tells exactly what one needs and can use most efficiently.

At Year's End, 1956. New York: CBS Television. 1957. 3 booklets, each 56 pages: Part I, *The New Frontier*; Part II, *The Big News of '56*; and Part III, *Years of Crisis*. On Sunday, December 30, 1956, thirty-three hours before the year 1956 ended, CBS television broadcast the most memorable and momentous events of 1956 in a series of three consecutive hour programs beginning at 3 P.M. E.S.T. The full text of these commentaries is contained in these three booklets. The first booklet (Part I) is a review of the scientific achievements of 1956 with the science news being reviewed by Robert Trout, Ned Carmér, and Douglas Edwards, with Will Rogers, Jr., presiding. The second booklet (Part II) is a summary of the year's news events as reported by Charles Collingwood. The third booklet is a round-table report on world conditions by Howard K. Smith, European correspondent; Dick Hotteslet, correspondent from Germany; David Schoenbrun, correspondent from Paris; Daniel Schorr, correspondent from Moscow; Winston Burdett, correspondent from the Middle East; Bob Pierpont, correspondent from Tokyo, and Eric Sevareid, correspondent from Washington, D. C., with Edward R. Murrow as moderator.

AYRE, H. G., and ROTHWELL STEPHENS. *A First Course in Analytic Geometry*. New York 10: D. Van Nostrand Company. 1956. 232 pp. \$3.85. This book is intended as a freshman course in college. However, it can be used by advanced students in the senior year in high school. Most entering college students have no knowledge of the geometry of three dimensions because of its

gradual disappearance from the high-school curriculum. Consequently, an introduction to three-dimensional geometry in elementary college mathematics is more important than it previously was, especially in engineering and the sciences. Most texts in analytic geometry introduce three-dimensional geometry in the final chapter, a chapter the teacher always hopes to cover but seldom reaches. In this book it is integrated into the text from the beginning.

The simultaneous treatment not only saves time, but also gives emphasis to the fundamental ideas involved rather than to the particular formulas and equations which may be derived. Directed especially toward preparing students for the calculus and engineering, the book introduces ideas important in these subjects. Hence, traditional emphasis on conic sections has been avoided; along with quadric surfaces they have been covered in brief sections. Instead, space has been given to an intuitive introduction to the derivative and its geometric application, to a brief account of vectors, and to topics more commonly considered.

The text is written for a three- or four-semester-hour course; however, there is sufficient material and enough flexibility to enable the instructor to select topics for a briefer or a longer course, according to his judgment. The authors have refrained from outlining alternate courses and suggesting topics for possible omission because instructors usually prefer to select topics to meet the needs of their classes and to satisfy their own personal requirements.

BAILEY, MATILDA; LALLA WALKER; ROSAMOND McPHERSON; and J. E. REED. *Our English Language, First Course*. New York 3: American Book Company. 55 Fifth Ave. 1957. 446 pp. \$3.20. This is the first of the high-school texts in *Our English Language series*. *Our English Language, Second Course* will be available soon. The *Third Course* and the *Fourth Course*, to be published in January 1958, will complete the series from kindergarten through high school.

This First Course book should have strong student appeal. The attractive cover designs, the brilliant full-color illustrations, the many pertinent cartoons from leading magazines, and the red type which is used to emphasize rules and standards—all contribute to the striking appearance of each text. The attention paid to the actual needs and interests of high-school students, the clear explanations, the easy readability, and the interesting continuity in 90 per cent of the exercises assure students both pleasure and real learning experiences.

Among the many things that teachers will like in this book are: the comprehensive coverage, the balance between work dealing with communication and work dealing with skills; the amount of functional exercise material; the diagnostic testing sections; the additional exercises provided in the handbook section, "Year-round Helps," at the end of each book; and the organization which pairs each chapter on communication with a chapter concentrating on related skills. In addition, teachers will like the practical teaching suggestions in the *Guide and Key*, which is available for each text, and the *Workbooks* now being prepared for each grade.

BAKELESS, JOHN. *Background to Glory*. Philadelphia 5: J. B. Lippincott Company. 1957. 386 pp. \$6. George Rogers Clark (whose brother, William, was to win fame on the Lewis and Clark Expedition) was a redheaded giant who fought for and secured what was then the vast wilderness between the Alleghenies and the Mississippi—a land of bitter cold and oppressive heat, of swollen rivers and impenetrable forests—and a land of Indians.

Clark's was the incredibly trying task not only of fighting the British but also of coping with the French, Spanish, and Indians, all eager to

further their own ends. He never lost a single battle, but the reader will realize fully that the ultimate victory was hard won as he follows Clark on the unbelievably harrowing march on Vincennes and to the bloody rout of the Shawnees at Piqua. Unfortunately, after the Revolution, George Rogers Clark was to live out his life in relative poverty and in bitter disillusion, forgotten by the country he had helped to create.

BAKER, M. J. *Anna Sewell and Black Beauty*. New York 3: Longmans, Green and Company. 1957. 95 pp. \$2.50. These were sad days for the loving little family brought up in the simple ways of Quaker life—businesses failed and the London streets held terrible sights. Anna's life was entwined with her mother's and together they worked for the poor and exiled, the ignorant and imprisoned. Anna and her brother were so well-schooled in this attitude that they readily gave up a long-anticipated seaside holiday to send the money to famine-stricken Ireland.

But Anna's love and understanding of animals, her desire to protect them, was innate. Once her anger toward a man mistreating a cart horse was so forceful that he retreated in shame from the scene of his cruelty. Of all the animals, large or small, to which she gave her love and attention her favorites were horses. Even as a small girl she seemed to have a way with them and grownups were surprised at her lack of fear.

BARONDES, R. de R. *Garden of the Gods: Mesopotamia, 5000 B. C.* Boston 20: Christopher Publishing House, 1140 Columbus Ave. 1957. 467 pp. \$6. Since the days of his boyhood, the ancient Near East—the Cradle of civilization—has had a strange fascination for the author. Its names have been like poetry in his ears; its cities and countries have haunted many a waking moment. Stories of Nimrod, Nippur, Ninevah, and Nebuchadnezzar fired his earliest imagination. With maturer years, wider reading, travel, and the growth of critical faculties, their historical importance has been greatly increased.

This book on prehistoric Mesopotamian lore and legend makes no claim to being a definitive survey of the immensely broad subject with which it deals. It is rather an attempt to record some of the salient features in an era when man was emerging from the cocoon of civilization. Then, too, it has seemed advisable to include a variety of literary types and composition, such as thrilling narrative, graphic description, the lyric outburst, the bit of essay as alluring as the winding road—all necessary to portray primeval man in the right perspective.

The text on the whole is meant to express the wholesome content that comes only when one performs to the best of his ability, and should appeal to those who make their first acquaintance with the lore, traditions and the arts of an ancient cultural race of which little is known, or written about. It should be of equal interest to the general reader and the specialist.

BARTLETT, RUTH. *Insect Engineers*. New York 16: William Morrow. 1957. 128 pp. \$2.75. In many ways ants resemble people more closely than do any other living creature—for better and for worse. They live and work together in organized communities whose members have special tasks and functions. They build their own homes, with nurseries and storerooms; some ants even build bridges. They are also the only other creatures that make war against their own kind, to gain land, to acquire riches and power, to make slaves of their enemies.

Besides describing and picturing various kinds of ants—their anatomy, social habits, and engineering feats—this book presents the good and bad aspects of

ant behavior. Devoted workers feed and tend their mother, the queen, and her hundreds of babies. Other workers serve as herders, farmers, hunters, or soldiers. But there are also ant beggars, thieves, drunkards, and ruthless murderers. A brief final chapter gives exact instructions on how to collect ants, place them in glass nests, and watch their activities.

BASS, R. D. *The Green Dragoon*. New York 17: Henry Holt and Company. 1957. 499 pp. \$5.75. When Lieutenant Colonel Banastre Tarleton, commandant of the British Legion, returned to England from the American Revolution, he brought with him a string of flashing victories, one terrible defeat, a hand mangled at the Battle of Guilford Courthouse, and the epithets of "Bloody" Tarleton and "Butcher" Tarleton. And in the midst of defeat, Tarleton was hailed as a conquering hero from London to Liverpool.

Among the dazzling society that feted Tarleton was Mrs. Mary Robinson, the incomparable Perdita, fashion plate of London and darling of Drury Lane. Mary had begun her acting career under the hypnotic eye of old David Garrick, had gone far under the managership of Richard Brinsley Sheridan, had gone even farther by becoming mistress to George, Prince of Wales.

The hero and the actress met in the studio of Sir Joshua Reynolds. He was handsome and arrogant; she was poised and charming. "It was so delightfully characteristic of both of them that he became her lover in order to win a bet, and that she sought solace in other arms upon learning that she had been duped." Such was the unlikely beginning of a relationship that would last through fifteen years.

In their fifteen years together Ban and Mary danced, played, wrote, gambled, spited each other, reconciled, traveled, politicked, squandered fortunes, struggled to stay in the social whirl. Ban's friends were the sons of King George, the gambling gentry at Brook's Club, the noble sportsmen of "the silken fray," the roistering bully boys home from the American campaigns, the up-and-coming Whig politicos with whom Tarleton had fallen in after his election to Parliament. Mary, as illness caused her to turn to writing poetry and some of the most successful of romantic novels, added such serious friends as William Godwin and Samuel Taylor Coleridge to the flamboyant company of the Duke of Lauzun and Charles James Fox. As for her enemies, Pitt, Wilberforce, and the Duke of Wellington were Tarleton's favorites; he inveighed against them with special anger, usually ending with that famous gesture, the shaking of his three-fingered fist; "These gave I for King and Country!"

From Major Andre to Marie Antoinette, from the American Revolution through the War of 1812, the great personalities and great events of the time pass through the pages of this book.

BATES, MARSTON; and P. S. HUMPHREY, editors. *The Darwin Reader*. New York 17: Charles Scribners. 1956. 480 pp. \$6.75. There has long been a need for an edition, carefully edited and in a practical size and format, of the important works of Charles Darwin. Although his name has become a household word since he published the *Origin of the Species*, there has been no one-volume edition of his writings available.

Now, for the first time, in readable and portable form, comes a Darwin Reader covering the heart of the five books which are best known. They are *The Autobiography*, *The Voyage of the Beagle*, *The Origin of the Species*, *The Descent of Man*, *The Expression of the Emotions*, and parts of less well-known works. Although written last chronologically, *The Autobiography* is an ideal introduction to the reader.

It is important to note that these selections have not been rewritten—they are pure Darwin. The dull and the unessential have been eliminated, and what remains is that material which the authors have felt illustrative of Darwin's most important and interesting ideas. They have managed as well to retain his most readable prose; and while presenting the fundamentals of Darwin's revolutionary thought, they have also painted a picture of an immensely curious and indefatigable mind. In addition, the editors have appended a critical bibliography which will prove valuable to those interested in further reading.

BEATTY, CHARLES. *De Lesseps of Suez*. New York 16: Harper and Brothers. 1956. 334 pp. \$4.50. Ferdinand de Lesseps, a diplomat, was a determined man who, with only intermittent support from Napoleon III but with the beautiful Empress Eugenie steadfastly on his side, pushed the Suez Canal through the hot sands of Egypt against the hostility of Turkey and the strong opposition of England, fighting labor riots, cholera epidemics, political intrigues, and financial crises as he went. He saw the Suez Canal through triumphantly—and declined the title of Duke of Suez. Then at the age of sixty-four he entered into his second marriage—with a girl of twenty, by whom he had twelve children.

At seventy-four de Lesseps inaugurated the Panama Canal project, which was to develop into one of France's bitterest political scandals, and which brought about the aged de Lesseps' arrest and trial. The author has brought new material to the little-known story of a giant among men—a man whose dreamed-of canal, realized in 1869, now less than a hundred years later is shaking the Middle East and enveloping a large portion of the world in its troubles.

BENNETT, EVE. *I, Judy*. New York 18: Julian Messner. 1957. 192 pp. \$2.95. Judy Lansing, a senior at Denver Central High School, was miserably unhappy, for she still had not attained her one goal—reporter on the school paper. She desperately wanted to become a writer, but nobody took her seriously except Miss Smith, her best-loved English teacher, who always spoke a word of encouragement. Maybe this wouldn't matter if she were popular, but Judy was naturally shy and her activities centered around the few friends at high school whom she had known all her life. Anyway who wanted to date a tall, skinny beanpole who never looked well-groomed—even her attractive mother chided her about her carelessness.

BIBBY, GEOFFREY. *The Testimony of the Spade*. New York 22: Alfred A. Knopf. 1956. 442 pp. \$6.75. This book was planned and written explicitly as a companion volume to *Gods, Graves, and Scholars*, which dealt mostly with the Mediterranean world. It is the first popular book to trace consecutively the movements and the flowering culture of our early ancestors from the Alps north to Scandinavia, and from Russia to Ireland—from the cave dwellers of France to the "barbarian" tribes described by Caesar and Tacitus and the Norse Sagas.

The author, a noted archaeologist, has created a stirring and lucid narrative in which the rich cultures of these peoples, hidden in obscurity only a short time ago, come vividly alive. To the antiquarians of the nineteenth century, the line of civilization passed through Rome and Greece back to Palestine, and everything else belonged to outer darkness, to a remote and undecipherable Stone Age. They did not dream that this dateless stretch of time, without records and without heroes, would soon be divided into historical eras, centuries, and even years.

When Worsaae, a great Danish archaeologist, saw that prehistoric objects belonged to vastly different eras, the concepts derived from ancient writings such as the Bible were forced to yield before the testimony of the spade. The antiquity of man was established. Worsaae's successors gradually pieced together the puzzle of early Europe. After the discovery of the cave paintings of Altamira and the Dordogne, a succession of brilliant excavations revealed a parade of cultures from the Ice Age to the time of the Vikings, all bringing with them magnificent artifacts of stone, ivory, amber, bronze, iron, or gold. We see the reindeer-hungers of Stellmoore, creators of the first totem poles, and the mammoth-hunters of Predmost. We see men settling at the kitchen middens of the Baltic and at the remarkable lake villages of Switzerland. Some thirty centuries before Christ, we see the first farmers migrating from the Middle East, followed by the megalithic missionaries, religious fanatics who built all over Europe great stone burial vaults and shrines like those at Stonehenge. Then we see peaceful, prosperous Bronze Age villages, Germanic and Slavic hordes pouring into Europe, and finally the Viking seafarers who buried whole ships to commemorate their dead kings.

BIGLAND, EILEEN. *Madame Curie*. New York 10: Criterion Books. 1957. 191 pp. \$3. From the glowing dreams of a young girl with a passion for learning, through her development into the mature woman whose scientific discoveries were rewarded with world-wide acclaim, this new biography vividly recaptures the extraordinary spirit of Madame Curie, co-discoverer of radium and twice winner of the Nobel Prize. In 1891 a wide-eyed young girl, breathlessly excited by her first glimpse of the dome of the famous Sorbonne, arrived in Paris to begin her studies. We see her struggling with her lessons in a bare, cold garret, experience with her the vital and exciting desire for knowledge. We witness her meeting with Pierre Curie . . . her growth and development into a devoted wife and mother, a dedicated scientist, an ardent Polish patriot, and a citizen of France and the world.

BLISH, JAMES. *The Frozen Year*. New York 3: Ballantine Books, 101 Fifth Avenue. 1957. 155 pp. Paperbound edition, 35c; hardbound edition, \$2.75. A science fiction novel.

BLOND, GEORGES. *The Great Migrations*. New York 11: Macmillan Company. 1956. 200 pp. \$4. This is the opening passage of an extraordinary book which describes the great animal migrations. It is divided into five sections—the flight of the wild geese, the impulsive journeyings of the herring and the salmon, the wandering of the buffalo herds, the march of the locusts, and, finally, the suicidal migrations of the lemmings. All these have been described before. What makes this book unique is the dramatic quality of the writing, and the ability of the author to make real and to convey to the reader the special quality of each of these vast and mysterious displacements. We see the death of the wild geese on one of the peaks in the Himalayas, blown against the mountains by the wind and snow; the vertical migration of the herrings; the buffalo herd tumbling over a precipice in thousands; the curious loves of the locusts.

BRANDES, L. G. *A Collection of Cross-Number Puzzles*. Portland, Maine: J. Weston Walch, Publisher, Box 1075. 1957. Student edition 156 pp. \$2; teacher edition, 226 pp. \$2.50. One copy of the teacher edition is free with orders for ten or more copies of the student edition. In this book cross-number puzzles are presented in sufficient quantity and variety to be used as a teaching aid. There are one hundred and four puzzles with over 2,800 mathematical computations for students to work out. These range from simple numbers

calculations to fairly complex essay type problems. They include all the fields usually covered in general mathematics classes—whole numbers, fractions, decimals, percentage, powers and square roots, measures, perimeters, areas, and volumes. The author shows the pupils clearly and simply how to work the puzzles. The answers appear in the teacher edition only, along with many suggestions on how to use cross-number puzzles to best advantage.

Pupils ordinarily resent the boredom of using the same fundamental mathematical processes over and over, as they must if they are to master them. When the cross-numbers system is introduced, boredom vanishes! Teachers experimenting with this material in the spring of 1956 reported pupil reactions as follows: nine respondents reported excellent, four reported good. The book is recommended for mathematics classes from the seventh- to ninth-grade levels, and for review purposes after that.

BRAYNARD, F. O. *Famous American Ships*. New York 22: Hastings House. 1956. 223 pp. (7½" x 10") \$5. Few people realize how closely America's history is intertwined with ships and the sea. From early Viking times on down to that thrilling day not so long ago when the superliner *United States* won back for America the trans-Atlantic speed pennant, ships have played a significant role in the American story. And here, in this absorbing lives and exploits of the 60 ships, great and small, whose adventures have helped make our country a world power. His lively text is illustrated with his own pen-and-ink drawings depicting, in authentic and artistic detail, all the vessels featured.

Here are the stories, each with accompanying full-page illustrations, of the *Mayflower*, whose hull may still be in existence; of the *Griffin* in which LaSalle explored the Great Lakes; of the early American schooners with their revolutionary new type sails; the privateers which earned fortunes for their owners during the Revolution, the Napoleonic Wars and War of 1812; the ships of the China trade, such as the *Grand Turk*. Here, too, is the *New Orleans*, which opened up the great era of Mississippi steamboating; the earliest steamers on our Atlantic coast; and the lush ships of the Hudson and Fall River lines; the trans-Atlantic sailing packets, whalers and swift clipper ships; the ships which opened our steam services to Europe, the Orient and Australasia.

Also included are ships like the heroic Edward Sewall, last of the wind-jammers; the famed ferryboat *Brinckerhoff*, now in a museum; the legendary *Leviathan* and other ships of World War I fame; the ships of our once-thriving coastwise trades, and a selected group of today's great luxury liners carrying the Stars and Stripes to every ocean. Finally, the author lets his imagination run in predicting what the Atomic Age ship will look like.

BRIGGS, T. H. *Poetry and Its Enjoyment*. New York: Bureau of Publications, Teachers College, Columbia University. 1957. 334 pp. \$4. The author presents a novel definition of art which should be helpful to all who have been puzzled by the conflict of their judgments with those of the experts. Though the definition is simple, it has many practical implications which are copiously illustrated, not only with poetry but also with references to music and pictorial art.

The book gives a sound basis for appreciation of the several arts. While not intended to be a school text, it is so lucid and interesting in exposition that even young people can read it with pleasure and benefit. It will prove a valuable addition to school and public libraries, and many readers will wish

to have it on their own shelves for reference and for the pleasure of rereading the stimulating text and well-chosen illustrations.

BRIGHT, F. F., and RALPH POTTER. *To Be an American*. Philadelphia 5: J. B. Lippincott Company. 1957. 635 pp. This book is one of the *Reading for Life* series—a series of reading anthologies which is designed to be a friendly help to educators faced with this critical problem. Throughout the years during which they were testing and retesting the articles, stories, and poems which appear in this series, the editors were keenly conscious of the difficulties experienced in teaching the traditional literature course. It has been their desire and it is now their belief that in the selections contained in these books will be found good reading that will stimulate young minds and at the same time will pass the tests of good literary craftsmanship.

These texts have been built around the following objectives: getting pupils to develop: (a) an honest and sincere joy in reading, (b) a permanent interest in reading, (c) essential attitudes and habits of reading, and (d) a desire to enlarge their living experiences. This specific book of the series is composed of six units—The Seekers; Freedom and Responsibility; Chance, Challenge, and Choice; Legend and Legacy; In Time of Trial; and The Finders. It encompasses 108 selections from a wide variety of authors. Included also are unit introductions, unit tests (48 pages), introductions to selections, and suggested exercises at the end of each selection.

BROWN, J. M., editor. *The Ladies' Home Journal Treasury*. New York 20: Simon and Schuster. 1956. 600 pp. \$7.50. Here is a gold mine of reading for the whole family: the finest stories, memoirs, humor, biographies, articles, poems and pictures that have appeared in one of America's great magazines since its founding in 1883. Over the years, *The Ladies' Home Journal* has commanded the talents of the most distinguished American and English writers, from Thomas Hardy and Edith Wharton to Lytton Strachey and Pearl Buck, from Sarah Orne Jewett to Dorothy Canfield, from Rudyard Kipling to James Michener, from James Whitcomb Riley to W. H. Auden. In this volume you will find them at their best.

Out of the *Journal's* rich archives, John Mason Brown has chosen 600 pages of entertainment to satisfy every mood and every whim. Is it suspense you want? Turn to the stories by Daphne du Maurier, Agatha Christie, and Rebecca West. Laughter is furnished by a galaxy of wits, from John Kendrick Bangs to Cornelia Otis Skinner and Ogden Nash. Romance and adventure? There is authentic Irish magic in Seumas MacManus' story of a mischievous beauty who enslaves a reckless daredevil of a fellow. Wilbur Daniel Steele, many-times winner of the O. Henry Award, tells a gripping tale about a child and two dangerous outlaws. Ronald Dahl contributes one of the flight stories that have put him in the front rank of this generation's writers. For family reading by the fireside you will find A. A. Milne and Robert Frost, Clarence Day, Eugene Field, and many more.

In the *Journal's* magnificent articles, America's yesterdays come alive. Admiral Byrd, fresh from his triumphant exploration of the South Pole, writes a frank and moving report on how it felt to be the man of the hour in the days of frenzied ticker-tape welcomes. Young Jane Addams tells the sheltered American housewife of 1907 why girls go wrong. And if a real-estate agent were trying to rent the White House, he would not show his client the informal comments on its domestic arrangements made here by a former tenant named Benjamin Harrison.

BUNN, J. W. *The Art of Officiating Sports*, second edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1957. 412 pp. \$4.75. This book brings to sports officials, coaches—and to students of officiating and coaching—material that has been further tested and improved. Many of the book's more than 100 figures, diagrams, and forms have been clarified and made more useful. Several of the descriptive sections were made more practical and easier to follow. The material has been up-dated to take into account the latest rules and practices followed in the different sports.

The book covers every phase of officiating both the major and less popular sports played in this country—from baseball to lacrosse, from track and field to ski meets, from wrestling to badminton. The material on each sport has been compiled by experts in coaching and officiating that sport. The special value of this book is not that it presents complete, detailed rules for every sport, but that it gives the reader a guiding philosophy that forms a basis for judgments and decisions in each sport. The author helps the official orient himself with respect to the event he is officiating.

The book is divided into three convenient sections: the first describing the job and qualifications of the official; the second dealing with those sports that require a decision on every action (baseball, track, tennis, etc.); and the third on sports that require discriminating judgment (football, basketball, hockey, etc.).

Each sport is treated separately and the techniques required of the official in each are explained in detail. In addition, those play situations that cause the official the greatest concern, those that are likely to create a divergence of judgment, or those that need the special attention of officials, are given particular treatment.

BUNYAN, JOHN. *The Pilgrim's Progress*. New York 20: Pocket Books, Inc., 630 Fifth Avenue. 1957. 320 pp. 35c. The famous book in pocket-size edition.

BURACK, A. S., editor. *Four-Star Plays for Boys*. Boston 16: Plays, Inc. 1957. 243 pp. \$3.50. The 15 one-act, royalty-free plays in this book were collected to provide high-quality dramatic material for all-boy casts for use in schools, clubs, camps, and scout troops. Exciting plots, vivid characterizations, and true-to-life dialogue insure the success of any performance of these plays. Included here are comedies and dramas which offer ample opportunity for using the talents of the comedian or the serious actor.

Such characters as doctors and reporters, cowboys and clowns, pirates and space men, and "regular" boys fill the pages of these lively plays. Whether the setting is Sherwood Forest, the "Santa Maria," a modern newspaper office, a circus, a castle, or a contemporary living room, these dramas will delight and excite actors and audiences alike. All of these plays have been tested by actual performances. They are easy to stage and require simple sets and inexpensive costumes. Production directions for all plays are included.

BURKITT, MILES. *The Old Stone Age*. New York 3: New York University Press. 1956. 268 pp. \$3.75. When was it that man crossed "the Rubicon" of emerging from the animal state? When he kindled fire to warm his body? When he used that fire to cook his food? When he fashioned tools to make his work easier and more effective? Or was it when he fashioned words to express his needs and feelings?

The author, Lecturer in archaeology and anthropology at Cambridge, takes the story of mankind from those stages to others which recorded artistic representation of elemental drives—the magnificent polychrome drawings of

man's source of food, the bison, which combine respect for its power with admiration of its beauty in movement, or sculpturings of the human female, the mystic symbol of man's fertility and hope of his posterity.

This is an overview of the information laboriously accumulated by archaeologists and anthropologists in the last fifty years of digging and delving into the European remains of prehistoric man. Written for the layman's understanding, with explanations and definitions of the terminology of the young science, and within the purpose and confines of this particular study, it is an accurate and scientifically sound study which eschews unwarranted speculations about the cultures of our early antecedents.

BURMAN, B. L. *It's a Big Country*. New York 17: Reynal and Company. 1956. 284 pp. \$4. Here are the towboatmen of the Missouri who pilot their craft on water so thick it can only be eaten with a spoon and run their boats over channels so dry a catfish must stand on his head to keep his gills covered. Here are the Wonderful Ozarks with their bee hunters who stalk wild bees as though they were lions, and the famous fox racers with their singing hounds to chant the Symphony of the Ozarks. Here is Cumberland justice, with its sheriffs who arrest murderers by simply sending out a penny postcard, and Judge Honey, who addresses the men and women who come before him by the Southern term of endearment on the theory that it makes their jail sentences easier to bear.

In these pages the reader journeys *via* towboat in the Grand Canal, USA; he penetrates the vast and mysterious Louisiana marshes, full of alligators, and voodoo, and men seeking the lost treasures of Lafitte. He is lured by the fascination of the Everglades and the strange rituals and customs of the Seminole Indians. From the shipwrecks on Cape Hatteras, he learns the treacherous ways of the sea.

BURN, MICHAEL. *Mr. Lyward's Answer*. Boston 8: Beacon Press. 1956. 296 pp. \$3.95. Behind the newspaper headlines about blackboard jungles, teenage criminals, dope peddlers, knife-packers, and the rest of the vicious young gangsters, are the teen-age human beings themselves—and the causes which made them reject parents and society. It is these young human beings who interest Mr. Lyward; and at his famous school at Finchden Manor he enrolls about 40 boys, averaging 17 years of age, and ranging from the backward to the criminal.

There is no curriculum. Discipline appears to be handled with an extremely light touch. The methods are quite unorthodox—even shocking to some observers. But they work. Mr. Lyward has the great gift of sympathy. And in his more than 25 years of running Finchden, he has succeeded where parents, teachers, and psychiatrists have thrown up their hands. This is a book which took England by storm and which continues to be hotly discussed. In America, *Time* magazine devoted its Education section (August 27, 1956) to Mr. Lyward, saying, "Schoolmaster Lyward emerges from the book as one of the most unusual of living educators." The simple fact is that Mr. Lyward has saved scores of delinquent, maladjusted boys from being threats to society.

BURNHAM, H. A.; E. G. JONES; and H. D. REDFORD. *Boys Will Be Men*, third edition. Philadelphia 5: J. B. Lippincott Company. 1957. 487 pp. The purpose in writing this book has been twofold: *first*, to help young people meet their personal concerns and needs; *second*, to present to young people educational experiences relating to home living. While this book is directed to the needs and concerns of boys, it may be used equally well in classes of boys

and girls. It may supplement those books directed primarily to the problems of girls and those written for both sexes.

This book presents the current range of incomes and scales of prices for food and clothing so that economic problems considered may be realistic. New synthetic fabrics used in clothing are described. Advances resulting from recent medical research are noted in the new methods of caring for burns, of applying tourniquets, and of giving artificial respiration. Changes in social conditions and customs that affect family living are recognized. Problems of migrant families and the effects of their mobility on the development and education of the children are observed. Recent changes in government services to the family with the organization of the United States Department of Health, Education, and Welfare are discussed. These include the urban redevelopment program.

BUTLER, C. H., and F. L. WREN. *Trigonometry for Secondary Schools*, second edition. Boston 16: D. C. Heath and Company. 1957. 368 pp. \$2.96. This book has been planned and written to provide a textbook in plane and spherical trigonometry particularly adapted to the needs of high-school students. The text is written to provide logical, complete, and clear explanations in easily read language. Background material is reviewed as needed.

This new edition has been prepared to meet the needs and interests of today's pupils. The chapter on "General Properties of Trigonometric Functions" has been brought in earlier because of increased emphasis on the subject and the wish of many teachers to deal with these properties early in the course. Many new exercises provide practice in the analytic aspects of trigonometry.

The authors do not presuppose that students have had previous training in trigonometry. There is a full development of every topic studied as well as frequent reviews of related topics in algebra and geometry. There is a simple and consistent treatment of the principles of computation with approximate numbers. Care has been taken to maintain a balance between analytic trigonometry and numerical applications, and between formal work and applied problems. Trigonometric functions are introduced by means of similarity of triangles. Applications are taken from geology, shop practice, building, and surveying. There is an interesting chapter on home-made instruments applying trigonometric principles.

CADELL, ELIZABETH. *I Love a Lass*. New York 16: William Morrow. 1956. 248 pp. \$3.50. As ever, the generations are no problem for the author, whose winning books are the more appealing for their well-mannered warfare between the age groups. Thus a very old lady and a very young boy are as important to this double love affair as salt and pepper are to a proper lunch. The lovers themselves are splendid Cadell characters: Sebastian, a rich, young English bachelor who has spent his life driving fast cars and dodging hopeful mothers; his friend, Joss, a quietly unorthodox good guy; and Jessica de Vries, a pleasant prospect for anybody's hand—or money.

The mystery ingredient is a Gallic enchantress laconically introduced as Tante Marie. She is graciously played by a young woman of effortless poise, young of heart but old of intuition. It is here that the fun begins. First there is a strike, and Joss and Sebastian find themselves stranded in France. No car—no vacation! Then, alors! The Countess buys a taxi, What else? And who should drive it but these perfect strangers with their peculiar baggage?

CANDEE, M. D., editor. *Current Biography Yearbook*. New York 52: H. W. Wilson. 1957. 718 pp. \$6. For seventeen years, newspapermen, librarians, and writers have turned to this book for frank and objective life

sketches of men and women in the news. It is composed of 335 new biographies, with portraits, of accomplished and exciting personalities. Some 110 biographies reflect international news. They include 8 presidents; 10 prime ministers; 2 foreign ministers; and 18 ambassadors, all of whom have directly or indirectly influenced the big news stories in Hungary, Cyprus, and the Suez.

The U. S. government is well represented by 25 Congressmen. Twenty Governors, over 25 writers, 23 musicians, 6 labor leaders, 35 businessmen and industrialists, and 43 educators are among the approximately 40 other occupational groups represented. Fifty-nine sketches are of outstanding women.

Biographies are prepared by world-wide research correspondents from numerous reference sources such as periodicals, newspapers, books, and international and educational organizations. The result is biographical and bibliographical information often unattainable elsewhere. A special feature is the "Classification by Profession" which groups all 335 biographies according to occupation.

- CARMER, CARL, editor. *Calvalcade of America*. New York 16: Crown Publishers, Inc., and Lothrop, Lee and Shepard Company, Inc. 1956. 382 pp. (7 1/4" x 10") \$4.95. Here, in this passing parade of great Americans, we have a fascinating new kind of American History, told through the stories of the men and women who made it. The strength, the quality, and the very greatness of our country stem from our richest resource—the American people themselves. Leaders, fighters, teachers, workers, merchants, farmers—free men and women of all trades and professions, of all creeds and colors—famous and humble—helped America grow, kept our national family one and indivisible, and served to make the United States of America the great power of the free world.

In this book of living history are dramatic accounts of the golden honor roll of Americans and their deeds, achievements, and contributions that mark their glory and stand out in our past. Among the heroes and heroines covered in this volume are the famous ones like Paul Revere, Benjamin Franklin, George Washington, Thomas Jefferson, John Paul Jones, Eli Whitney, Daniel Boone, Daniel Webster, Abraham Lincoln, Robert E. Lee, U. S. Grant, Walt Whitman, Mark Twain, Thomas A. Edison, the Wright Brothers, but also many like Nathaniel Bowditch, Horace Mann, James Buchanan Eads, Clara Barton, Clifford Holland, Walter Reed, whose fame does not yet match their importance.

CARTHY, J. D. *Animal Navigation*. New York 17: Charles Scribner's Sons. 1956. 151 pp. \$3.95. The history of human navigation is one of a long struggle to produce instruments and devices to help men to find their way across the Earth's surface. Yet for thousands of years, unaided by gadgets, ants have returned to their nests, birds have migrated for hundreds of miles and eels have swum back to the continents from the depths of the Atlantic. Usually their navigation is accurate, for otherwise they die. The ways in which animals make use of the signposts in the world around them makes a fascinating study. They make use of signs unperceived by humans; for example, the pattern of polarized light from the sky, or smells so diluted in the air or in water that we do not realize their existence.

CLARKE, PAULINE. *The White Elephant*. New York 16: Abelard-Schuman. 1957. 145 pp. \$2.50. Nona owned what she considered to be a white elephant, so she sold it, and decided to spend some of the money on a treat for her young cousins, Alister and Georgina. They decided to spend the morning at the museum, have lunch, and go to the theatre. But on the way, Nona saw a fur coat in a window that was too much of a bargain to resist so she went in

to buy it. From that moment, the excitement begins because of the "things" Nona finds in the pockets, and a merry chase ensues throughout London, with lots of interesting people getting involved.

COLTON, R. G.; G. M. DAVIS; and E. A. HENSHAW. *Living Your English*, Grades 7 and 8. Boston 16: D. C. Heath and Company. 1957. Each book, 208 pp. \$1.28 each. Boys and girls will read of their own everyday interests as they learn to spell, to punctuate, and to use correct grammar. These English textbook-workbooks provide answers for those students whose preparation has been faulty or whose progress has been unsatisfactory. Basic language essentials are covered gradually. Exercise materials provide repeated opportunities for boys and girls to practice these important skills in new ways.

Teenagers can develop language skills by the effective and unique succession of exercises used in these books. This succession of exercises includes three practices, special word study, a warm-up, and final testing, and assures enough practice to teach slow-learners the necessary basic language skills. Boys and girls will respond to the direct "you" approach that gives a maximum of readability. Getting and using the idea is stressed throughout instead of merely doing the assignment. The numerous amusing cartoons make English composition even more inviting.

Some of the special features of these two workbooks are: vocabulary and sentence structure on the fourth-fifth grade level for grades 7 and 8; vocabulary and sentence structure on the fifth-sixth grade level for grades 9-12; a text that is closely related to teenage activities; plenty of repetition in basic language skills; answer strips for helpful self-evaluation; an approach adaptable to either laboratory or traditional methods; a large number of practice exercises of the continuity type; and cartoons that teach and amuse. Each book also includes 8 progress diagnostic tests in a 32-page booklet form.

CONNELL, BRIAN. *A Watcher on the Rhine*. New York 16: William Morrow and Company. 1957. 320 pp. \$4. This book takes the wraps off one of the potentially most explosive issues of our day—the place of Germany in the Western World. The author was there while Germany emerged from bankruptcy and defeat to the point where it is again the balance wheel of Europe, and he has blunt answers to the questions Americans ask most: How about the Nazis today? What part are they playing in the new regime? Has German character changed? Will Germany become a threat to us and to the peace of Europe? What price are we paying for Germany's miraculous economic recovery? What price would Germany herself pay for reunification of East and West? and What sort of men are leading Germany today? . . . and what of the men who may emerge as leaders?

The author's report is both a keen analysis and a sound warning. It is not always comfortable reading, but it is honest, challenging, and perceptive. In effect, the author can, and does, show what the political, industrial, and emotional climate of Germany is today.

CONRAD, SYBIL. *Enchanted Sixteen*. New York 17: Henry Holt and Company. 1957. 219 pp. \$2.75. Connie Foster—"enchanted sixteen"—lives in a rosy glow most of the time. She daydreams about the glamorous career she'll have some day, and indulges in wishful thinking about her English teacher; her best friend, Val's, older brother; and her brother, Jeff's, college roommate—not caring if she hurts the feelings of loyal Buzz, the high-school football captain. She gets a rude jolt, however, when she finds that her "heroes" are living lives of their own, untroubled by thoughts of Connie Foster. And she finds her daydreams of exotic careers pale to insignificance as her

school friends' horizons broaden and each one gets an interesting and tangible summer job.

Connie starts looking for a job then, too, and finally takes one for the season—looking after two small children at Cape Cod. There she makes friends with girls and boys of her own age, and emerges from the summer with a sense of responsibility, a knowledge of what her career will be, and a more realistic attitude toward life in general.

COOLEY, D. G. *The Science Book of Wonder Drugs*. New York 21: Franklin Watts, Inc., 699 Madison Ave. 1954. 256 pp. \$2.95. The author tells the story of drugs already developed—sulfas, antibiotics, vitamins, and hormones, as well as a variety of others for the treatment of specific illnesses. In addition, he summarizes work in progress, and offers thrilling glimpses of drugs foreshadowed for the future which may conquer cancer, polio, and other diseases now baffling to mankind.

COURTNEY, GWENDOLINE. *Those Verney Girls*. New York 21: Franklin Watts, Inc. 1957. 218 pp. \$2.75. There were four of them. Alison was the shy one, Elizabeth was the rebel, Susan was the homemaker, and Georgie—well, you could always count on Georgie to say the wrong thing at the right time! They had run their motherless home for years, and even if the neighbors didn't approve of the way they ran it, they had fun. Lively and talented, they lived in the exciting world of books and the theater and let the dust gather where it would. When their father married again, the girls staged a rebellion to end all rebellions! What happened when the hated "stepmother" turned out to be not only a delightful companion, but also someone who held the key to a whole new world of exciting adventure and achievement, makes a warm and amusing story of dreams come true.

CRANE, FLORENCE. *Gypsy Secret*. New York 22: Random House. 1957. 254 pp. \$2.95. Gazing unhappily out her window in the Lakes' home, Randy Alvarez asked herself the same question for the hundredth time. Why had she been brought to live with these strangers? The Gypsy girl knew, of course, about the promise that had been made so long ago to her dying mother. For years Randy had known that when she was sixteen she would have to leave the Chicago tenement where she had been brought up, and go to live with the Lakes in Calhoun County. But what promise, she wondered now, could be important enough to sever from her beloved father—and from all the Gypsy people she had grown up among and loved?

"You'll find happiness here with the Lakes," Randy's father had said. "You are loved in this place." But it was a puzzle to Randy. The kindness of Mr. Lake and the gradual friendliness of his sharp little wife—even the attentions of the handsome young man on the hill—weren't enough to make up for all that she had left behind. No, there must be some other reason for her being with this non-Gypsy family, Randy felt, some hidden reason that she kept searching for and that kept eluding her.

CRAVEN, W. F. *The Legend of the Founding Fathers*. New York 3: New York University Press, 1956. 195 pp. \$4.50. Americans have always avowed that the principles which guided our founding fathers must—in some measure—continue to guide our way of life. It is an inspired national tradition and we possess an ageless determination to keep it glowingly alive. For better or for worse, the American community has consistently looked to its origins for an explanation of its distinctive qualities and thus for an indication of what its future should hold. How we have come to establish, to change, and to

nurture our national tradition is the engagingly related story the author tells here.

The author prefers to give the words founding fathers a remoter and deeper sense than that commonly associated with the patriots who signed the Declaration of Independence. He takes it as his task to prove that the true roots of our national existence lie in the long decades of this country's prenational history—specifically, in austere Calvinist, Protestant New England. There, he contends, the Puritan theme of religious freedom first took on the additional overtones of political freedom that is today our American heritage. The simple question, "Why came we here?", so frequently put to the early colonists by their Puritan clergymen, has remained basic to every immigrant group since.

In preparing this study, the author has provided a documented account of what successive American generations have managed to find in the colonial past—an account of how they interpreted what they found and kept it a living tradition in the books they have written, the speeches they have delivered on great occasions, the memorials they have set up, and the commemorative observances they have arranged.

DAVEY, ELIZABETH, editor. *France In Crisis*. New York 52: H. W. Wilson Company. 1957. 208 pp. \$2. This book contains 32 articles by authorities and leading journalists reprinted from such publication as *Foreign Policy Bulletin*, *New York Times*, *Yale Review*, and *Foreign Affairs*. A balanced objective picture is achieved through presentation of all shades of opinion on controversial matters. Sixty-six pages are devoted to an exhaustive survey of France's role in North Africa and the Suez. The editor has also assembled definitive material on the Nine-Power Conference of 1954 and France's rejection of EDC. Especially valuable for reference is the dissection of local French politics, including Gaullism, Communism, Poujadism, and the energetic liberalism which is taking form as the New Left.

DAVISON, ANN. *My Ship Is So Small*. New York 16: William Sloane Associates. 1956. 255 pp. \$3.75. Here at last is the whole story of the voyage of the *Felicity Ann* and her gallant, one-woman crew. If you saw any of the newspaper stories, or read *Life's* report, you'll naturally expect this to be one of the most exciting true stories in seafaring history. It is—but it is also the lively, colorful, occasionally rollicking story of a warmly human being who just happened to be the first woman ever to sail the Atlantic alone. Ann Davison left Plymouth, England on May 18, 1952, in the 23-foot sloop, *Felicity Ann*. Her voyage lasted 17 long months. It took her to France, Spain, Africa, the Canary Islands—and then the long trans-Atlantic voyage to America.

The story is told in three sections: first the excitement of fitting out and sailing, the thrill of being at sea alone, the good luck and bad as the *Felicity Ann* beat down the Coast of Europe, the good times in port, the camaraderie of other sailing folk sharing the same enthusiasm and challenge; then the long, solitary 65-day passage from the Canaries to the West Indies. And this may well be the most exciting to those who know and love the sea, for it consists of Mrs. Davison's running log—technical details, storm, wind, near-disaster, loneliness, and, finally, the landing in Dominica—elation mingled with the simple pleasures of being on land again and talking to people.

DEAN, V. M. *The Nature of the Non-Western World*. New York 22: New American Library of World Literature, 501 Madison Ave. 1957. 288 pp. 50c. A timely, penetrating look into the ancient traditions and modern ideas by which the world's people live.

DEFOE, DANIEL. *Robinson Crusoe*. New York 20: Pocket Books, Inc., 630 Fifth Avenue. 1957. 508 pp. 50c. Another famous story in a pocket-size edition.

DeFRANCE, J. J. *Alternating Current Fundamentals*, second edition. New York 11: Prentice-Hall. 1957. 272 pp. \$4.50. Since the publication of the first edition (which was written specially for the addition of material that would make this text equally applicable to students in the "power" field), several chapters have been expanded and new ones added to include: Additional problems with power applications; Measurement of power—wattmeter; Reactive volt-amperes; Three-phase systems (balanced); Power in three-phase systems; and Unbalanced three-phase loads.

Pre-requisite to the understanding of this volume is a good foundation in direct current principles, including inductance and capacitance (as covered in *Direct Current Fundamentals*). In addition, the student must have a good background in the principles of algebra and a basic knowledge of the elementary trigonometric functions. It is recommended by the author that if *Direct Current Fundamentals* (or its equivalent) is used as a first course, a mathematics course covering the above phases, plus use of the slide rule, be included at the same time as preparation for this book.

The text is intended for use at the "technical institute" level—above high school. Engineering students will also find this book of value, in that it clearly presents the basic concepts so often lost in a maze of advanced mathematics. The review problems at the end of each chapter serve a dual purpose—to summarize, in challenging form, the highlights of each chapter and at the same time to check on the student's mastery of the chapter's contents.

DESCOLA, JEAN. *The Conquistadors*. New York 22: Viking Press, Inc. 1956. 410 pp. \$5. The whole story of the Spanish conquest of the New World, in all its heroism, violence, missionary zeal, and greedy brutality, is told in this sweeping one-volume narrative. It offers the general reader a cumulative account of the Spanish exploration of the Americas.

The story is told through the biographies of the successive leaders. Columbus and his discovery of the "Indies"; Cortes and his struggle against Montezuma (as well as against Narvaez and his other Spanish rivals) for possession of the rich prize of Mexico; the Pizarro brothers in their adventurous and cruel destruction of the ancient Inca kingdoms and their forays to the wild South; Coronado and his search for the Seven Cities of Cibola in our own Southwest; Las Casas's Missions; Ponce de Leon in Florida; De Soto's ill-fated discovery of the Mississippi—all their stories are linked in a grand panorama that forms a backdrop to our history.

Written from the point of view of a European historian, the book has an added depth in bringing out the relation between Old World events and New World ventures. Moreover, the backgrounds of the conquered peoples and their flourishing civilizations are filled in to give a fresh and revealing survey of pre-Columbian America.

DIMOND, S. E., and E. F. PFLIEGER. *Our American Government*. Philadelphia 5: J. B. Lippincott. 1957. 624 pp. This book has been written because the authors believe that developing good citizens is the most important job of the American schools. The authors have built the text around four general aims: (1) to stimulate interest in our government; (2) to provide essential understanding of the operations of our government; (3) to promote careful thinking about governmental problems; (4) to encourage active participation in governmental activities.

To help accomplish these purposes the book has been organized into seven units with thirty chapters. This organization has been carefully planned and is based on the experiences of many teachers and many classes. Each unit is teachable as a separate unit, yet each unit makes a contribution to other units. Each unit has a special introduction called "A Glimpse Ahead." A concluding section, "A Look Back," gives opportunity to put to immediate use the information learned in a unit. This unit organization is flexible and makes possible a great variety of teaching methods.

Unit One introduces the study of government in a unique way by presenting the basic ideas of our government in a simple but fundamentally sound pattern. Unit Two is a description of the major features of the national government. Unit Three considers the state governments, while Unit Four treats the local governments. Unit Five brings together the important matters of government finance. Unit Six and Seven examine the impact of our government on world affairs and on the lives of our people at home.

The materials at the ends of the chapters and at the ends of the units have also been carefully planned. The "Study Questions" focus attention on important ideas of the chapter, but include questions that require thoughtful use of information. The "Civic Words and Phrases" are not long lists, but they provide a convenient checklist of significant terms. The authors do not believe that government should be taught as though it were a foreign language involving a difficult translation process. Rather a civic vocabulary should grow out of understanding and experience with government. The "Ideas for Discussion" are designed to enable students to test their thoughts against the ideas of others. The "Things To Do" provide a great range of activities. The individual interests and talents in any government class are extremely varied. This helps to provide a good teaching and learning situation. Teachers who wish to conclude a unit of learning with culminating activities will find the end-of-unit materials a real help. Panel discussions, attitude statements, situations to discuss, and activities for civic action receive special attention.

DOS PASSOS, JOHN. *The Men Who Made the Nation*. Garden City: Doubleday and Company. 1957. 480 pp. \$5.95. In the twenty-odd years from Yorktown to the Louisiana Purchase, a handful of men dreamed, fought, compromised, and finally brought into being the brash creation called the United States of America. In this, the ninth book of the distinguished *Mainstream of America Series*, the author has interwoven the history of those critical years with the stories of the men who shaped the times.

This was the period when the nation was trying to decide whether to become a republic or a monarchy; whether to side with France or England; whether to turn the government over to the money-men or keep it in the hands of the people. This time of trial and error probably produced more great men than any other period of American history—Washington, Jefferson, Hamilton, Franklin, Adams, Madison, and Monroe; and vivid figures such as Lafayette, Burr, Jay, Wolcott, Pickering, Marshall, and Morris. In this book the author tells their story.

The distinguished biographer, historian, and novelist dramatizes such historic episodes as Franklin's delicate maneuvers to make a peace treaty with England which would not alienate France; Hamilton's involvement in the XYZ papers, the waning of his political power, and his fatal duel. Here also are lesser-known personal details and anecdotes: an account, for instance, of the time the three most important men in America—Washington, Jefferson, and Hamilton—took a casual fishing trip together in a tiny open boat.

DOWNEY, FAIRFAX. *Sound of the Guns*. New York 3: David McKay Company. 1956. 351 pp. \$5.50. This book tells the stirring story of the American artillery from its first major action at the seige of Louisbourg in 1745 through the battles in Korea. It traces the evolution of weapons and techniques through the modern development of the atom cannon and guided missiles. It abounds in vivid battle scenes and the storied exploits of gallant gunners from General Knox, father of American artillery, to our forward observers in Korea; of brave artillery women, Margaret Corbin and Molly Pitcher; of famous cannon christened by their crews; of artillery horses and mules; Knox's epic feat in bringing the guns from Fort Ticonderoga through the winter snows to the seige of Boston; the defense of Fort McHenry under "the rocket's red glare"; the flying batteries of the War with Mexico—O'Brien's heroic stand at Buena Vista—Bragg galloping into action and obeying Zach Taylor's command to "double-shot your guns and give 'em hell"; the South's incomparable horse artilleryman, the gallant Pelham; Hunt's massed guns at Malvern Hill and on the fiery field of Gettysburg; Reilly killed on the walls of Peking in the Boxer Rebellion as his young lieutenant, Summerall, blew open the gates of the Forbidden City; cannoneers who fought at Belleau Wood, St. Mihiel, and the Argonne; and those who manned the guns for the tremendous concentrations of the Second World War and Korea.

EAGER, EDWARD. *Magic by the Lake*. New York 17: Harcourt, Brace and Company. 1957. 191 pp. \$2.95. If Jane and Mark and Katharine and Martha had stopped to think, they might have ordered magic by the pound, or by the day, or by threes in the good old-fashioned way, or even by halves, the way they had known it before in a book called *Half Magic*. But they didn't stop to think, and so the four children found themselves with a whole lake full of magic, and it took the rest of their vacation for them to tame it, and learn how to handle it, and find the treasure that waited at the end.

Extraordinary things happened while they were learning how to handle the magic—not always what the children expected—such as "haunting" a pirate ship and almost having to walk the plank; of finding themselves at the South Pole just in time to see it being discovered; or becoming involved with Ali Baba's forty thieves while trying to find some treasure to help their stepfather Mr. Smith, whose bookshop business had taken a bad turn. By the end of vacation, in a surprising way, the children really were able to help Mr. Smith, and though they decided wistfully they'd probably had their fair share of magic, they still hoped for more.

ELLIOTT, L. P. and W. F. WILCOX. *Physics—A Modern Approach*. New York 11: Macmillan Company. 1957. 672 pp. \$5.12. This book presents scientific principles in a way that is designed to help the pupil understand the "whys" of physics. Each chapter starts with a problem whose outcome is unknown to him. As he reads the problem, he will find that he may have asked himself the same question or considered a similar situation.

Then he will follow the discussion as various scientific "guesses," or hypotheses, are proposed to explain a particular phenomenon. After analyzing each of the "guesses" logically and relating them to past observations or experiences, the most plausible "guess" will be tested by experiment. If the experiment confirms the hypothesis, the hypothesis becomes established tentatively as a theory or principle to explain a certain set of facts.

Another unique feature of this book is the use of a second color both in the text and the line drawings. Important principles, laws, and formulas to be mastered are printed in red. To aid him in visualizing the dynamic aspects of

the innumerable teaching diagrams, the motion of forces, the movement of electrons, and paths of light rays are shown in red.

Scattered throughout the text are numerous problems and solutions. These solved problems appear immediately after an important principle or formula has been developed. In those cases where the subject matter warrants it, unsolved problems follow the illustrative examples to help him in checking his understanding.

Summaries and conclusions at chapter ends will help him in reviewing the important points of the chapters. They also restate as conclusions the principles developed experimentally. The "Questions for Review" will check his understanding of the principles learned and his ability to apply those principles to new situations.

Particularly valuable in checking his mastery of the subject matter is the wide variety of problems. The problems are graded in difficulty from the simple to the complex. The first few problems in each set may involve substitution in a formula, while later problems of a given type may require the application of several principles. To give him firsthand experience in demonstrating or applying principles, there are various projects at the ends of most chapters. Some of these projects are very simple and can be performed in a few minutes.

EMERY, ANNE. *Senior Year.* New York 36: Teen Age Book Club, 33 West 42nd Street. 1957. 192 pp. 25c. A story about a girl whose best friend in school goes to another school. Every thing goes wrong until Sally discovers herself.

EVANS, E. F., and R. L. DONAHUE. *Exploring Agriculture.* New York 11: Prentice-Hall. 1957. 380 pp. \$4.40. In the development of this book, the authors have attempted to summarize the most recent information on our rapidly changing agriculture. This information will help the reader to understand the problems of agriculture and the ways in which science is helping to solve these problems. The book is intended primarily for the study of general agriculture. Readers will find it a dependable source of concise and authentic information about agriculture, a basic industry upon which all of us depend.

Within its 29 chapters, many problems, principles, and practices are discussed in relation to each other and to the whole field of modern agriculture. Examples are given for all geographical regions of the United States. Almost 300 photographs and illustrations have been selected to tell a well-organized and connected story of modern agriculture—not just to make the book more attractive.

FENNER, PHYLLIS. *The Proof of the Pudding.* New York 19: John Day Company. 1957. 256 pp. \$3.95. To the question why our children don't read, the author's answer is that they do. She tells here what children like to read, and why; suggests how they can be encouraged to read even more; and recommends hundreds of specific books for various groups and types of readers. Her book is designed both for pleasurable reading and for reference. In the main portion of it, each chapter is devoted to a particular kind of book, and concludes with a highly selective annotated list of favorite titles. A thorough index lists every title and author mentioned, with a distinctive entry to direct the reader to the place in the text where each title is most fully described.

FERRIS, HELEN, selector. *Girls, Girls, Girls.* New York 21: Franklin Watts. 1956. 253 pp. \$3. Every girl has her problem, and often it's a problem she hasn't yet shared with anyone else. Perhaps, like Nancy and Jenny Lee, she's in love; or perhaps, like Cress, she's trying to find out who she really is.

It may be the problem of getting along with other people that's bothering her, or of choosing her future career. There are girls who suffer with needless embarrassment because their families are "different," and others who must find courage within themselves to surmount difficult circumstances not of their own making. They are all here, these girls with problems, in a superb collection of short stories by writers who sympathize and understand.

FISH, R. A. *The Running Iron*. New York 16: Coward-McCann, Inc. 1956. 380 pp. \$8.95. This is a stirring chronicle of a man's dream conceived in the disillusionment after the Civil War and realized during the fabulous days of the cattle empires in the West. It is this dream that leads Robert Merrill Forge from a plantation in Alabama to a cattle ranch in the Chugwater Valley in Wyoming, and it is this dream that Cacoon Dennison, a Texan, and the woman, Holly Morgan, share with him as they travel up the old Texas trail with a herd of long-horn cattle.

The book is also a story of Robert Forge's family; of his wife, Fonella, a gentlewoman who never became reconciled to leaving the South, and who strove to undermine the success her husband sought to achieve; of his daughter, Victoria, her husband, Courtney Cable, and the Yankee, Pryde Evans, with whom Victoria falls in love; of his sons, young Rob, Christian, and Novelle.

The exciting plot unfolds in the postwar South and then in the Great West when the Indians were making their last desperate stand against the cattlemen and those who lusted for the gold in the Black Hills. Based on the facts of history, this book tells the dramatic and realistic story of the life of an American family during a period of violent change and great happenings. The author who was born and raised in Wyoming, and still makes the state her home, presents a completely authentic and true picture of the times.

FLAIR, TERRANCE. *Halfway to Heaven*. New York 3: Ballantine Books, Inc., 101 Fifth Avenue, 1957. 186 pp. 35c. Non-skids, dollar-hungry pilots, war surplus planes, hunting for a pay load.

FULLER, J. F. C. *A Military History of the Western World*, Vol. 3. New York 10: Funk and Wagnalls. 1956. 678 pp. \$6. This third volume completes the survey and brings the chronicle down to the end of the Second World War. It covers the period from the Seven Days battle in 1862 to the battle of Leyte Gulf in 1944. After analyzing the period between the Napoleonic Wars and the American Civil War, its three battles of crisis—Seven Day Battle, Siege of Vicksburg, Battle of Chattanooga—are examined in lucid detail; the strategy, the men, the results. The rise of Prussia and Japan and their victories over Imperialist France and Czarist Russia follow in seeming preparation for the First World War and its aftermath, the fall of three empires, two badly undermined, and the portentous rise of Communist Russia. The story is told in bold strokes and in minute detail in terms of its military and political events and of its leading actors.

The Second World War is recounted in following the bold sweep with which it engulfed the world. The great campaigns, the rise and fall of nations and of military might, the victorious and the conquered, the men and the arms, the events of crisis—these are the materials for this brilliant, objective, and truly absorbing writing of history.

GABRIELSON, CATHERINE. *The Story of Gabrielle*. Cleveland 2: World Publishing Company. 1956. 118 pp. \$2.75. This is the story of a gallant little girl's last days on earth and of how, through her love and strength of spirit, she was able to illuminate the joyous nature of living as a final and lasting gift to her mother. This is a story of last days recorded with the same

love and wonder and faithfulness to detail that one usually associates with a child's first days, by a mother who believed them to be equally important. Because no one knew how many days there would be, gradually the past became unimportant, as did the future, until finally they were able together to taste and savor each moment in the moment. Because they had to face up to death and did, they were rewarded, quite unexpectedly, with a greater awareness and understanding of the joy of living. Together they were able to come to the last moment of all without fear, filled instead with wonder.

GALLAND, ADOLF. *The First and the Last*. New York 3: Ballantine Books, 101 Fifth Avenue. 1954. 280 pp. 50c. The rise and fall of the Luftwaffe told by Germany's Commander of fighter forces—1939-1945. Here too is the account of the effect of American daylight bombing raids on Germany and the overwhelming problems they posed for the German leaders.

GARBER, P. E. *The National Aeronautical Collections*, ninth edition. Washington 25, D. C.: The Smithsonian Institution. 1956. 172 pp. \$1.50. This book presents a history of the National Air Museum and discusses the importance of such a museum. It also presents a history of the development of flight, describes some of the "firsts" in flight, and the early planes. Included also are biographical material on individuals, on the U.S. Air Force, and on the Navy, as well as information about trophies won, speed, the jets, the sonic barrier, etc.

GARD, ROBERT. *Scotty's Mare*. New York 16: Duell, Sloan and Pearce. 1957. 160 pp. \$3. Scotty almost broke his father's heart when he decided to trade his heifer Blacky for a scrawny and sad-looking bay mare. But his mother believed in him, especially when she saw what Scotty's care and treatment did to give new spirit and looks to Trip, as Scotty named the mare.

But peace at home was soon upset when the horse broke loose and ran away. Alone, Scotty sets out to search for the lost horse, and, finally, he comes upon Trip in a mountain meadow. But there too Scotty makes another discovery that leads to much bigger adventures. For the odd lumps of quartz he found beside an old leather bag in the mountain meadow revived tales of the Lost Lemon Mine. With old Dave Brown, the ranchhand, and his mother and father, Scotty goes on an expedition to the lost gold mine. But accidents—it seems to be fate that Scotty's mare is unlucky, a real Jonah, born to cause accidents—and strangers and curious goings-on in the timbered mountains lead to changes in their plans and to worse troubles, coming to a climax in a terrible fight with a young Indian who has captured Trip and claimed her. The tension and the suspense mount up until there is a big moment, a real surprise, when Scotty makes one last discovery. It is surprising, too, in the end, the way Scotty's mare comes back to him.

GARDNER, MARTIN, editor. *Great Essays in Science*. New York 20: Pocket Books, Inc., 630 Fifth Avenue. 1957. 430 pp. 35c. This is a selection of writings about science by twenty-eight men and women who represent some of the finest that Western culture has to offer. From Darwin on evolution to Einstein on relativity, here are thirty essays covering many diverse and fascinating subjects.

GARST, SHANNON. *William Bent and His Adobe Empire*. New York 18: Julian Messner. 1957. 192 pp. \$2.95. In the wilderness of New Mexico Territory, William Bent cast a long shadow on the pages of American history, engraving his name on mountain peaks and wilderness trails and in the hearts of all who knew him. His story is a fascinating document of a period when living was free and thrilling—and dangerous.

From boyhood Bent yearned to explore the mysterious trails into the unknown where white men never had been. Leaving his native St. Louis at sixteen, he signed with a fur company and journeyed by keelboat up the treacherous Missouri River, trapping the beaver streams. It was not long before he learned to surpass the Indians at their own skills and to speak their language fluently. When he reached New Mexico Territory, he saved the lives of two Cheyenne braves, winning not only the loyalty of the entire Cheyenne nation, but also the hand of the Chief's daughter in marriage.

Adventure, however, was not enough for William Bent—he wanted power and wealth. His dream of building a mammoth adobe fort—which would draw the Indian nations to trade with him—was realized by the time he was twenty-five. It was named Fort William, although to the mountain men who knew it and spread its fame it was always "Bent's Fort." With William Bent in charge, the fort soon became the spearhead of American expansion to the Southwest and controlled a far-flung empire.

GOMPERS, SAMUEL. *Seventy Years of Life and Labor.* New York 10: E. P. Dutton and Company, Inc. 1957. 334 pp. \$5. Gompers, one of the creators of modern industrial America, was born in the East Side of London in 1850, into a family of Dutch Jews. He immigrated to the United States at the age of thirteen. He there joined a Local Union of cigarmakers of New York City and from that time forward his life was bound up with the trade union movement, first locally then nationally. Gradually the organization of the unions progressed until in 1886 the American Federation of Labor was formed, with Gompers as its president. His autobiography is that of a valiant and relentless fighter who spent a lifetime laying the foundation of the modern labor movement. It is the story of his participation in that movement and of the ideals which he set for it.

GOODMAN, EDWARD. *Make Believe.* New York 17: Charles Scribner's Sons. 1956. 254 pp. \$4.50. This is a complete, workmanlike, and intelligently organized book. Part I—Basic Theory—defines and evaluates acting as an art; lists the prerequisites to acting; stresses the importance of study and the need of constructing the necessary foundations. Part II—Problems of Practice—deals with the do's and don't's of the stage; the methods of projection, "transference," speech patterns and rehearsal techniques. Part III is a summing up; a discussion of the theatre as a vocation—its hardships as well as its rewards—and an evaluation of various experiments with permanent theatre companies in this country.

GOODWIN, H. L. *The Science Book of Space Travel.* New York 21: Franklin Watts, Inc., 699 Madison Ave. 1954. 223 pp. With enthusiasm tempered by caution against over-optimism, the author tells of the fascination of travel beyond the earth from earliest times to the present and explains why a step rocket is the most likely device to conquer earth's gravity. What rocket speeds are today, and what increases they may reasonably be hoped to achieve; the advantage of establishing an unmanned platform in space before human beings risk plunging into the unknown; the limitations of atomic energy as a fuel for rockets; the problems of building and manning a space platform—all these are presented together with enough information about the laws of physics to make the principles behind space travel understandable to laymen. Provocative speculation as to the possible significance of flying saucers and a glimpse into the future of space travel round out this comprehensive book.

GORTON CARRUTH and STAFF, editors. *The Encyclopedia of American Facts and Dates*. New York 16: Thomas Y. Crowell. 1956. 714 pp. \$6.95. Now for the first time you can find side-by-side and in chronological order the facts, dates, and events from all departments of American life. This great encyclopedia is built on a new plan that is unique, simple, and efficient. There are four parallel columns throughout the book. They begin with America's earliest dates and proceed in exact order to the present. The four columns cover: (1) Politics and Government; War; Disasters; Vital Statistics; etc.; (2) Books; Painting; Drama; Architecture; Sculpture; etc.; (3) Science; Industry; Economics; Education; Religion; Philosophy; etc.; and (4) Sports; Fashions; Popular Entertainment; Folklore; Society; etc.

You can read the 10,000 entries in this unique encyclopedia in three useful ways: (1) across the page for the important facts of any year; (2) down the page for the development through several years of any subject; (3) with the index, which is complete and fully cross-referenced, for the looking-up of whatever interests you in American life and history. This arrangement—both contemporaneous and chronological—takes you easily and quickly through the entire warp and woof of America.

In all these fields this book brings you the vital statistics, records, important firsts, and other milestones of America. But it contains also the fads, fashions, slogans, sayings, and the hard-to-find happenings of yesteryear. It puts at your fingertips a whole treasure house of knowledge. Most of this information would require hours of searching in expensive sets and costly volumes. Much of it is not in any other reference book at all.

GOVAN, G. E.; and J. W. LIVINGOOD. *A Different Valor*. Indianapolis 7: Bobbs-Merrill Company. 1956. 470 pp. \$6. For many years Joe Johnston has been given far less than his due as a Confederate hero and able, devoted leader. This partial eclipse, the authors' exhaustive study establishes, was largely due to the tireless work of an eminent and powerful enemy and his coterie in Richmond. Johnston's evil genius was Jefferson Davis. Although bad feeling between Davis and Johnston was no secret to their associates, it has never before been systematically studied as it is here. The record is extremely damaging to Davis, who emerges as a second leading figure in the book.

The two men held opposing strategic views. They were temperamentally incompatible. Davis missed no opportunity to thwart Johnston or to darken his reputation, even by misrepresentation. Why didn't Johnston resign? He was a patriot willing to serve in spite of handicaps. Though the authors are temperate in statement, their revelations of Davis' conduct make sensational reading.

Against the best Union commanders, Johnston's military record matches Lee's. Neither Grant nor Sherman could pin his opponent even with almost double the force. But Sherman was never so successful in concealing his intention from Johnston as Grant was from Lee in his move to Petersburg. Johnston puzzled Sherman at Cassville, something Lee never did to Grant. And certainly in July 1864 the Army of Tennessee was in better fighting condition than the Army of Northern Virginia. Against the gifted Sherman, Johnston fought for 75 days over almost 100 miles of rugged terrain without one mistake of which Sherman could take advantage.

GRIFFITH, E. S. *Congress, Its Contemporary Role*. New York 8: New York University Press. 1956. 219 pp. \$3.50. In a time when it has become almost fashionable to malign Congress and to picture its members as buffoons of the Senator Claghorn variety, it is encouraging to encounter this latest

Griffith book (first published in 1950 and now a standard work) which treats Congress as it is, not as it has so often been represented.

This is by no means a mere eulogy to the American Congress, for the author is quick to indict weakness where he finds it. Rather, this volume deliberately attempts to bridge the gap between the popular picture of our national legislature and the actual working legislative body; to analyze Congress, under the Constitution, in relation to other governmental departments; and to evaluate its capacity to respond to a changing age. This the author approaches through three principal challenges: world communism, the growing power of selfish special interests, and the danger that the authority of a technically competent bureaucracy "may transform an ostensibly democratic government into dictatorship of civil service."

GRUBER, FRANK. *Buffalo Grass*. New York 16: Rinehart and Company, Inc. 1957. 249 pp. \$3. This is the story of the flat, hot land of Kansas and of the hardy, determined men who came to tame the prairies. The central characters are two returning Civil War veterans, loaded with captured Confederate gold, who establish a cattle town at the terminus of the railroad. Shrewd and forward-looking, Chad Morgan and Joe Jagger become the absolute owners of the town they create. But the harmony does not last, for these are rough times made rougher by the greed and intrigue of conniving men.

GUILLOT, RENE. *The 397th White Elephant*. New York 10: Criterion Books, Inc. 1957. 100 pp. \$2.75. Long ago in India there was a Child King who ruled over a distant province. One day he and his courtiers set out into the yellow jungle to find a new Imperial White Elephant, who would reign over the royal stables and carry the Child King upon his back on feast days. The elephant they found was called Hong-Mo-Hong-Mo the Magnificent—and was unlike any of the three hundred and ninety-six other white elephants who had ever ruled in the royal stables. In fact, one wonders whether Hong-Mo was an elephant at all!

HACKER, L. M. *Alexander Hamilton in the American Tradition*. New York 36: McGraw-Hill Book Company. 1957. 288 pp. \$4.75. As the guardian of the country's honor and integrity, as the spokesman for private enterprise under freedom, as a leader who defended American concerns in its foreign relations, Alexander Hamilton's accomplishments are as significant to us today as they were during our country's great period of trial from 1790 to 1800.

Even in the midst of the Revolutionary War, Alexander Hamilton understood that American survival was based on the establishment of honor and integrity in government—by honest fiscal management and the creation of a climate in which business ventures could originate and flourish. This position he held unwaveringly throughout his public life. He was able to give it splendid expression in his great reports as Secretary of the Treasury. He saw the desperate need for both domestic and foreign investment in America, for the United States was then a new, young, and underdeveloped country which could advance only through capital creation, diversified industry, and increased productivity. The author analyzes Hamilton's policies in both the light of his times and his historical origin and the light of twentieth century America. He finds Alexander Hamilton neither the monarchist his contemporary critics considered him nor the authoritarian some recent critics have thought him to be. Indeed, he was a great libertarian, only urging an "energetic" government because an emergency existed in domestic and foreign affairs. But always he remained devoted to freedom in a regime of law, welfare, and private striving.

HARRIS, MARK. *A Ticket for a Seamstitch*. New York 22: Alfred A. Knopf. 1957. 155 pp. \$3. This novel on baseball is written by a comparatively newcomer in writing. In his running account of the game and player, the reader finds not only humor but pathos as well.

HARRISON, G. R. *What Man May Be*. New York 16: William Morrow. 1956. 286 pp. \$4. In the short span of fifty years, science has literally transformed the world we live in—so that, within living memory, a seemingly known and ordered world has given way to one both new and strange; a world in which the person without specific scientific orientation finds himself—even while he enjoys the material comforts science provides—confused and confounded in respect to the deeper issues of human life and destiny. Does modern mechanized life subject the human organism to stresses it is not equipped to stand? Has science made religion obsolete? With nuclear energy, is man playing with the ultimate fire that will destroy him? It is to such profound questions as these that the author addresses himself in this book.

HART, W. W.; VERYL SCHULT; and HENRY SWAIN. *Algebra*. (*First Year*, 1957. 400 pp. \$3.20; *Second Year*, 1957. 480 pp. \$3.40). Boston 16: D. C. Heath and Company. Introductory pages in *First Year Algebra* introduce the beginner to the new subject, relate some of the history of algebra through the ages, and discuss a number of uses of algebra in daily living and specialized applications in industry, technology, and the sciences. A brief but very useful section gives the student suggestions on how to approach this new study—what skills and disciplines will be called for and what study methods will be helpful. Many of the chapter openings of books give an over-all view of the algebraic work to come, suggest its significance for the general scheme of study, and discuss its importance in daily occupations. Other openings take the form of inductive teaching and invite the pupil to discover and explore a new process. Photographs for both books have been chosen with care and imagination. There are pictures showing men and women engaged in vital occupations that require mathematics—engineering, architecture, industrial design, radar, and many others. Color and skillful design in the format give students the kind of attractive book they like.

The explanatory material is the core of any mathematics text. In these two books, the vocabulary is simple and non-technical; sentences are short; paragraphs are brief for easier comprehension. Teaching in the classroom, face to face with the algebra student and his problems; years of textbook writing, with plenty of proving time to test which techniques are really the most effective; the insight and boldness to choose new ways and new approaches, where they are needed—all these factors help to perfect the exposition. Explanation of new material is presented in a variety of ways, suited to the students' ability and progress in the course. Inductive teaching which prompts the student to explore and discover new conclusions and laws is often employed. At other times, when it seems more expedient, a presentation of explanation—understanding—use is offered.

Laws are demonstrated informally in *First Year Algebra* and the early part of *Second Year Algebra*, but as the second course progresses and the students gain in maturity, the proofs become more rigorous. A page-unit organization makes this series particularly easy to study, convenient to teach. Definite directions show the student what is to be done and how to do it. Charts, diagrams, drawings, and photographs supplement the written material—give the student visual aid where he needs it.

Practice materials systematically guide this learning and lead to the pupil's mastery of concepts and skills. In these books practice exercises are arranged in order of difficulty, thus insuring the fullest return for student effort. Chapter, cumulative, and comprehensive reviews register progress or indicate where the student is weak and requires more drill. Pretests and diagnostic tests help the instructor to judge the needs of individual students and the class as a whole. Chapter tests are a continuous check on achievement and comprehension. Cumulative tests review past work and help the student to see the course material as a unified subject. Final tests check the year's work and unify the year's study. Short answer tests, a type frequently used by examining boards, are included.

The series provides a workable answer for individual differences. Each book has a basic course that covers a year's work with as brief and simple a program as is consistent with sound learning. Optional practice examples of a more challenging and advanced nature are arranged within the framework of this basic course. The optional examples, clearly marked, may be used at the discretion of the instructor. In addition supplementary topics, related to the basic course, are given in the back of the book. This plan furnishes able and interested students with further relevant and provocative subject matter.

Throughout both books the utility of algebra is stressed. There are scores of pertinent, up-to-date problems. They constantly remind the student that he is studying a living subject, closely related to his daily affairs.

These new books are very attractive. Colorful covers, photographs, and color drawings invite the student to use and enjoy the texts. Equally important, design and color help to guide study. Illustrative examples employ color to mark the several parts of a problem. Color is used in the text itself and in the charts and graphs to emphasize and clarify.

HAHIGHURST, M. B. *Strange Island*. Cleveland 2: World Publishing Company. 1957. 221 pp. \$2.75. Despite Aunt Sally's reluctance to let her go, Faith Arnold anticipated a glamorous future as governess to the Blennerhassett children. Beautiful, luxurious Blennerhassett Island was vastly different from the sleepy frontier town of Marietta; young Mrs. Blennerhassett was charming and generous, her husband a gentle scholar. Although Marietta was full of rumors about the island and its distinguished visitors, Faith loved her new friends and was loyal to them. Only the frequent and mysterious visits of Aaron Burr and the warnings of her old schoolmate, Henry Gates, cast a shadow on the happy days. But being included in exciting plans for the future soon overcame Faith's dismay on learning that the Blennerhassett fortune was backing Burr in his grandiose scheme for western empire.

Before Faith and Henry grew to realize where their true loyalties lay, violence came to their beloved island, and the Blennerhassetts made a fateful decision. In this story of an impetuous girl caught up in a plot that almost changed the course of her country's destiny, the author sheds new light on a thrilling period in history.

HAYES, MARIJANE and JOSEPH. *Bon Voyage!* New York 22: Random House. 1957. 322 pp. \$3.95. Harry Willard, a rather typical father and husband from Terre Haute, Indiana, relates with droll good humor the comic and heart-warming adventures and misadventures that he and his family encountered on an action-packed vacation of six weeks in Europe. During their twenty years of planning for this trip, neither Harry nor his wife Katie would have dared to predict that they would attend a French family picnic in

Normandy, or give his sister-in-law in marriage at the altar of a small French church, or dance in the street on Bastille Day in Paris.

HEDDE, W. G., and W. N. BRIGANCE. *The New American Speech*. Philadelphia 5: J. B. Lippincott Company. 1957. 600 pp. Today the spoken word has become more influential than the written word. The human-voice media of communication have now become the most powerful forces that ever existed for mass education and thought stimulation. They operate in four directions: they are agents of political change; they are agents of cultural revolution; they have destroyed the barrier of distance; and they have upset the old foundations of education which were limited to reading and writing. Since this change, certain shifts in emphasis must be made according to the authors of this book. In it, they emphasize that education should now train students in speaking and listening as well as in reading and writing; that this training should not be limited to the talented few, but given to all who live in a democracy; and that this training should prepare future citizens for living in a democracy where the spoken word is now more influential than the written word. The book, composed of 25 chapters, is divided into six major parts as follows: speech and democracy, fundamentals of communication, public speaking, special types of speaking in a democracy, integration, and dramatics. Included also is a model constitution, a list of important days and events, and an address list of publishers of books and pamphlets, plays, and declamations and suppliers of recordings and films. Each of the 25 chapters contains a list of suggested activities and a list of references for further reading.

HENRY, JAN. *Tiger's Chance*. New York 17: Harcourt, Brace and Company. 1957. 188 pp. \$2.75. Jennifer loved to play with Rajah, the splendid tiger rug that Great-Uncle Pom had left her parents. "Roger," as she called him, was a model patient when she played nurse. Jennifer didn't believe in magic, but, as everyone—well almost everyone—knows, all tigers have magic in their whiskers, good only once and worth saving for the precisely right moment. When that special moment came, Rajah took Jennifer and her black cat Midnight on a journey back to his native jungle. And what a journey! They arrived just in time for a party the animals were giving to greet the New Year. Through a long and exciting night Jenny and Rajah adventured—together and separately—and by the time the party was over and morning had come, Jennifer had learned many things, especially that magic can be real to those who believe in it.

HEWES, LAURENCE. *Boxcar in the Sand*. New York 22: Alfred A. Knopf. 1957. 282 pp. \$4.75. This is an inspirational biography of the author in the best sense of the word. His first boyhood home was a boxcar on arid land near the Columbia River. Later he lived on farms in Virginia and Tennessee. He worked in San Francisco as a longshoreman and as a telephone company employee, and then, for a wild, intoxicating period before the Great Crash, became a bond salesman. With the depression he suddenly saw a different side of American economic life when he took a job with a Federal Land bank and personally administered funds to stricken farmers. He then moved on to rural relief work. From this he was plucked by Rexford Guy Tugwell to become his assistant. After the 1936 elections, he returned to resettlement work. This was the time of the drought and the Okies.

The author had risen to become Farm Security Director in the San Francisco Bay area when he was drafted to help carry out the dramatic and still controversial executive order to relocate the West Coast Japanese-Americans at Tule Lake. After this painful assignment, he was sent to negotiate and organize

farm labor recruitment in Mexico, where he found his office frequently mobbed by applicants. Afterwards, he was drafted by General MacArthur for an important role in his land reform program in Japan. That mission accomplished, he returned to America and to long-term reflections on this land and its people.

HODGSON, DICK, and H. J. BULLEN. *How To Use a Tape Recorder*. New York 22: Hastings House. 1957. 230 pp. \$4.95. The book aims to help business and home recorder owners learn how to get full value from their machines. It is written strictly for the recorder owner, or user, who doesn't know a cathode-follower from a phono jack (and cares less). While the book explains in layman's language the basic workings of a tape recorder and its accessories, its primary purpose is to show how to get maximum use from this versatile modern-day tool of communication.

For those who have a recorder in their homes, or who can take it home from the office, there are dozens of party games explained here. Outlined, too, are many uses of the recorder for hobbies, special events, child training, and smoother home operation.

For those who have yet to buy a recorder, this book explains what to look for in selecting a machine. There are simple charts showing every aspect of the "ideal" recorder, and complete information on all types of accessories. Finally, there is a frank, helpful discussion on the "care and feeding" of recorders, including what to look for in servicing or repairs.

HOOK, J. N.; MILDRED FOSTER; N. M. ROBINSON; M. H. THOMPSON; and C. F. WEBB, editors. *Literature of America*. Boston 17: Ginn and Company. 1957. 727 pp. \$4.16. The introductory section of this book enables the teacher and students to open the year by discussing the meaning of America and its literature as expressed in selected writings of contemporary authors. The book then presents the drama of American literature in five acts. "First Writings in America" presents the first act, in which colonists and their descendants, writing principally of their experiences in a new land, imitated the writing of England. In "The Rise of a National Literature" appears a literature no longer merely imitative, but uniquely American. "The Age of Romanticism" shows an important literary movement gathering momentum in the maturing nation, and "The Trend Toward Realism" reveals a new and challenging force in American life and literature. The fifth act, "The Twentieth Century," features a literature which reflects both romantic and realistic trends and which has attained world recognition, as attested by the many American winners of Nobel prizes for literature.

The scenes within the five acts are composed of the types of literature grouped for comparative study and appreciation, making the book adaptable for use in a course based on the study of types. Teachers who prefer to read the unit of modern literature first with their students, and then trace the story of growth from the beginnings, will find this book adaptable to that plan.

The study and background materials necessary for appreciating the selections are placed in the book as conveniently as possible. Each period is opened with a brief historical and literary survey. A biography and sketch of the author precedes the first selection by that author, and a headnote for each selection places emphasis on purpose and understanding in reading. Questions following each selection stress the development of reading skills, as well as the understanding and appreciation of literature. Through the pictorial time charts students are enabled to relate literary events to each other and to other important persons or events. Illustrations throughout the book give a visual

impression of the times in which the selections were written and help to make past and distant things more familiar.

Certain key or unusual words are briefly defined in footnotes whenever such definition seems to be useful for helping the reader to a complete understanding of the text and the meaning of the word is not implied in the context. Literary terms and proper names of general, cultural, or historical significance are listed in a glossary at the end of the book and identified in the text by an asterisk. As in the other texts in this series, a teacher's manual provides many time-saving suggestions.

HOOK, J. N.; MILDRED FOSTER; N. M. ROBINSON; and C. F. WEBB, editors. *Literature of England*. Boston 17: Ginn and Company. 1957. 818 pp. \$4.28. In the introductory section of this anthology, through writings of both Englishmen and Americans, the interrelationship of the two literatures and the fundamental likenesses of the two peoples are briefly considered. The book then leads directly into the story of "The Beginnings of English Literature," although it is possible to read first the selections in "Twentieth-Century England," if this better suits the course of study. In reading the literature of each literary age as a unit, students become acquainted with masterpieces of English thought in appropriate settings and in relationship to each other. Within the units, emphasis is placed on grouping by literary types for comparative study.

The study and background materials necessary for appreciating the selections are placed in the book where the reader may conveniently refer to them. A brief historical and literary survey opens each unit. A biography and sketch of the author precede the first selection by that author, and headnotes for the selections place emphasis on purpose and understanding in reading. Questions following the selections stress the development of reading skills, as well as the understanding and appreciation of literature. Through the pictorial time charts, students are enabled to relate literary events to each other and to other important persons or events. Illustrations throughout the book give a visual impression of the times in which the selections were written and help to make past and distant things more familiar.

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The teacher's manual provides many time-saving suggestions for planning the presentation of the story of literature and includes answers to the study questions. It is planned to help the teacher make the best use of the questions for the continued development of reading skills. Many questions and projects involving group activities have been reserved for the teacher's manual so that the teacher may plan group projects according to the interests and abilities of her class. The manual also offers supplementary material to help the teacher bring added enjoyment, understanding, and appreciation to her pupils in their reading.

HOOK, J. N.; V. M. PARSONS; B. E. PEAVEY; and F. M. RICE. *Literature of Adventure*. Boston 17: Ginn and Company. 1957. 544 pp. \$3.84. In this volume are selections for many tastes, written in many ways, but all basically good literature. People explore the wilderness, probe the mysteries of science, deal with unusual and perplexing problems, say what they think, or

just carry on their daily lives in the stories, poems, plays, essays, and biographical sketches in this book. Writers who are familiar with the animal world give a vivid picture of animal life. Native writers and travelers from the United States take the reader to neighboring countries, and guide him to an understanding of the unfamiliar as well as the familiar.

Variety is provided in the wide range not only of reading interests, but also of reading difficulty. There is adequate material in the book to allow the teacher to choose common readings that will best suit the interests and abilities of her class. Each selection may be read and discussed fully by itself; the selections gain meaning, however, as they are read in connection with the others in the same group.

The headnote for each selection gives background information where it is needed, and introduces the selection itself. In the biographical sketch that follows each selection are a few interesting facts about the author. Study questions emphasize understanding and appreciation and are designed to develop reading skills and abilities. Included in the biographical sketches and in suggested readings following the questions are references to over 300 books to aid students in extending their reading interests as developed in this volume.

The format of this book is in keeping with much of the popular material young people are likely to read. The illustrations are planned to help the reader to enjoy the selections as well as to see and to understand things which may not already be familiar.

Certain key or unusual words are briefly defined in footnotes where such definition seems to be useful for helping the reader to a complete understanding of the text. Proper names of general cultural or historical significance and literary terms referred to in the questions are listed in a glossary at the end of the book, and identified in the text by an astrisk. As in the other texts in this series a teacher's manual is provided.

HOOK, J. N.; V. M. PARSONS; B. E. PEAVEY; F. M. RICE; and M. H. THOMPSON, editors. *Literature of Achievement*. Boston 17: Ginn and Company. 1957. 669 pp. \$3.96. Through the stories, nonfiction, verse, and plays in this book runs a theme of achievement in many fields. These selections, however, picture more than achievement itself in various fields of work, in living in places near and far away, in courage, and in mastering the perils of the sea and of the air. Here the careful reader will find something deeper, a clue to the reasons for which people work and live and die.

People work, for instance, not only to earn dollars, but also to find satisfaction in their work and to give service to others. People here and all over the world respect similar values such as humility, loyalty, kindness, and honesty, and there is a remarkable similarity in their ideals. Individuals come from distant places to our country and bring with them achievements and high ideals which here are considered typically American; yet with a new point of view these ideals add meaning to the American way of life. In the achievement of courageous acts of various kinds the best in people is brought out, as it also is in the daily lives of those who live with the sea or create the continuing miracle of the air age. The play that ends this book presents a most interesting study of the part played in men's lives by honor and ideals.

The various categories in this book appeal to a wide range of reading interests and have been selected to present a like range in ease of reading. From the material in the book, the teacher will be able to choose readings that will best suit the interests and abilities of her class. Although the book is planned so that each selection may be read and discussed by itself, the selections

are so organized in each category that, read and discussed with the other selections in the same category, they present a well-rounded unit on that particular theme.

The headnote for each selection gives background information where it is needed and introduces the selection itself. In the biographical sketch that follows each selection are a few pertinent facts about the author. The study questions emphasize understanding, appreciation, and human values and are designed to develop reading skills and abilities. Included in the biographical sketches and in suggested readings following the questions are references to over 300 books to aid students in extending their reading interests as developed in this volume.

Certain key or unusual words are briefly defined in footnotes whenever such definition seems to be useful for helping the reader to a complete understanding of the text. These footnotes are to be found most frequently where it is difficult or impossible to understand the meaning of the word through context. Proper names of general, cultural, or historical significance and literary terms referred to in the questions are listed in a glossary at the end of the book and identified in the text by an asterisk.

Teaching reading became of increasing concern to the secondary-school teacher. Accordingly, the teacher's manual is planned to help the teacher make the best use of the questions which follow the selections in developing the reading skills and abilities of individual pupils. The majority of questions and projects involving group activities have been reserved for the teacher's manual so that the teacher may plan group projects according to the interests and abilities of her class. The teacher's manual suggests a teaching plan for the book and provides answers for the study questions. It also offers supplementary material to help the teacher bring the utmost in enjoyment, understanding, and appreciation to her pupils in their reading.

HOWARD, ELIZABETH. *A Girl of the North Country*. New York 16: William Morrow and Company. 1957. 222 pp. \$2.75. Calista Heath had lived in many different places during her sixteen years and had become accustomed to moving. But now that she looked for the first time upon the wooded hills and blue water of northern Michigan, she hoped she could stay for a long time at Martin's Haven, even though it was a tiny settlement closed in on three sides by the forest. The one-room cabin that was to be the Heaths' new home was something of a shock, but the cordiality of the few neighbors more than made up for it. Two of them gave Calista a particularly warm welcome—dashing Mark Treely and quiet Bruce Cameron.

This is the moving and dramatic story of Calista's introduction to pioneer life on the fringe of the wilderness—how she taught the neighbors' children in an improvised schoolhouse, and helped to support the family when her father had a crippling accident; how she found herself confronted by a mystery that cast suspicion upon the man to whom she had given her heart.

JARMAN, T. L. *The Rise and Fall of Nazi Germany*. New York 3: New York University Press. 1956. 388 pp. 95c. This book examines in frank detail the turbulent savagery of the Nazi regime in Germany—an era of naked horror and treachery unmatched in the history of mankind. What went wrong with the German people—orderly, industrious, perhaps the best educated in the world—that allowed them to accept so irresponsibly the violence and colossal brutality of Nazi leadership? What influenced the personality of Adolf Hitler—a man with a passionate lust for power, who could say without shame, "No one has ever achieved what I have achieved . . . I shall shrink from nothing and

destroy everyone who is opposed to me."? What internal forces arose to resist the Nazi policy of conquer, exploit, exterminate? How dead is Hitlerism today? What is the frightening, but equally possible chance of a Nazi revival?

The author, a noted historian who is thoroughly familiar with the German people and their language, suggests answers to these questions in this book—the first to treat as a single episode the entire history of Nazi Germany from the foundation of the party in 1919 through its crushing liquidation in 1945 and the Nuremberg trials. Charged with the dramatic tension of these terror-filled years, his account traces the intellectual and historical origins of National Socialism, the political and economic conditions in Germany that allowed Nazism to thrive, general characteristics of the German people, and the coldly ruthless personality of Hitler.

JEAN-AUBRY, GERARD. *The Sea Dreamer*, a Definitive Biography of Joseph Conrad. Garden City, New York: Doubleday and Company. 1957. 321 pp. \$4.50. Joseph Conrad was born a hundred years ago. Very little is generally known about him: we know that he was a Pole, who wrote in English, and that his writings (which include *The Nigger of the Narcissus* and *Typhoon*) have come to be thought of as classics. But what of Joseph Conrad, the man?

"I know that a novelist lives in his work. He stands there, the only reality in an invented world, among imaginary things, happenings, and people. Writing about them, he is only writing about himself. But the disclosure is not complete. He remains, to a certain extent, a figure behind the veil; a suspected rather than a seen presence—a movement and voice behind the draperies of fiction."—from *A Personal Record*, by Joseph Conrad.

In this definitive biography the "draperies of fiction" are drawn aside, and we stand in the presence of a forceful, complex, passionate human being. Until he was nine, Conrad—his full name was Theodore Jozef Konrad Korzeniowski—lived with idealistic, persecuted, and troubled adults. His father was sent to prison in Russia for nationalist activities, and Conrad and his mother joined him. When he was fifteen, the vigorous young man, who had never seen the ocean, left Poland to make his way as a sailor. It was an exciting life, and Conrad learned to live and understand the sea and sailors as few men in history have.

At twenty-nine he became a British subject, and received his Master's Certificate. One day, "thinking of nothing whatever," he began to write *Almayer's Folly*. It was finished in June of 1894 and was highly praised when it appeared. A new life began for Conrad, the sailor. He married, bought a house—for the first time, his life became settled. He made new friends: Henry James, Stephen Crane, H. G. Wells, and many others.

Conrad's writing years were not easy, despite his fame and success. Even after he had written such masterpieces as *Youth* and *Lord Jim*, he was extremely worried that he had "lost all sense of style." He was beset by ill-health and financial worries . . . but the novels he produced in these vital, absorbing times have assured him a secure place among the world's great literary figures.

JOHNSON, ANNABEL. *As a Speckled Bird*. New York 16: Thomas Y. Crowell Company. 1956. 318 pp. \$3.50. With genuine concern and strong curiosity, the reader will follow this swiftly plotted story, constantly asking, "What happens next?" What did bring Curt Marin back to teach—in an art school he had hated, in a town that housed all the resentments of his youth? And Lordy, who was she, with her marvelously graceful body, her boyish

clothes, her haunting night-club voice? There was Jesse, too—so strong, straight, quiet, and sure that hate and jealousy could never touch him.

At the Greenville Academy of Art, there were others who entered the tangled, urgent struggle to fulfill themselves. Mehala, the charming life-class model, who discovered that the art world often has its seamy side; Babs, rich, spoiled, sensuous; Brandt, who would do anything to promote the art school, and found he had almost scandalized its name.

JOHNSON, J. E. *Wing Leaders*. New York 3: Ballantine Books, 101 Fifth Ave. 1957. 302 pp. 50c. A fighter pilot's story from the battle of Britain to the last sorties over the Rhine by World War II's top allied fighter ace.

JOHNSON, R. I.; MARIE SCHALEKAMP; and L. A. GARRISON. *Communication, Handling Ideas Effectively*. New York 36: McGraw-Hill Book Company. 1956. 371 pp. \$4.50. Here is a unified text for freshmen courses which integrates the subjects of writing, reading, speaking, listening, and observing. The authors' purpose is threefold—to develop positive attitudes on the part of the student toward the communication subjects; to improve his skills in these fields; and to facilitate his personality development through the use of these communication skills.

This text departs from the "unit approach" of other texts, which complete one section or unit and move on to a completely new one. Here the progression is cyclic, and the book gives recurrent emphasis to the basic similarities among communication skills, rather than the differences. At the same time, the similar principles are presented against a background of student problems, motivated by student orientation and developing needs.

Material not usually found in other texts includes: a correlation of oral and written communication; an orientation unit making it unnecessary for the student to use an orientation handbook; a constant stress on evaluation and critical thinking; a practical approach to report writing; the basic importance of ideas; and the relation of communication skills to social and personal development. An extensive appendix provides in 43 sections a complete reference work pertaining to spelling, capitalization, punctuation, sentence structure, and grammar. Sample sentences illustrate each rule and principle, and practice materials follow each section.

JONES, E. L.; RUTH BARRY; and BEVERLY WOLF, editors. *Case Studies in Human Relationships in Secondary School*. New York 27: Bureau of Publications, Teachers College, Columbia University. 1956. 143 pp. \$2. The twenty-six cases included in this book are the result of more than eight years of consecutive planning about, and experimentation with, the case study method. In the late 1940's, under the direction of Dr. Esther McD. Lloyd-Jones, the Department of Guidance and Student Personnel Administration at Teachers College, Columbia University, began its work in this area. The purpose of this experimentation has been to further the study, the understanding, and the development of human relations knowledge and skills. These cases which have been selected from quite a number are those that have proved to be most effective in use. Fourteen have been selected from doctoral studies and the remaining twelve are being used in the training program at Teachers College. The introductory chapters and the questions following each case were contributed by the editors.

JONES, G. O.; J. ROTBLAT; and G. J. WHITROW. *Atoms and the Universe*. New York 17: Charles Scribner's Sons. 1956. 254 pp. \$4.50. This book by three distinguished scientists is a very successful attempt to present

in a simple way in one volume the fascinating results of research by classical physicists, nuclear physicists, and astrophysicists, both into the structure of matter and of the universe.

Not only the modern theories, but also their practical applications and the conclusions to be drawn for the future, are here discussed in language which can be understood by those without any special training in science. The most dramatic result of these developments is the practical release of atomic energy—the atom and hydrogen bombs on the one hand and the peaceful uses on the other. But no less exciting is the gradual unfolding of ideas which have led to the modern concepts of the structure of the atom, and the amazing progress in experimental techniques, from the atom-smashing machines to the giant optical and radio telescopes which have enabled much progress to be made in answering questions about the formation and constitution of the solar system, the stars, and the whole universe. Many of the modern developments of physics have been thought to have philosophical implications and the opportunity is taken to examine this question briefly. Among the illustrations, which include both plates and diagrams, are a number of beautiful photographs taken with the great 200-inch reflecting telescope on Mount Palomar in California.

KAMERMAN, S. E., editor. *Blue-Ribbon Plays for Graduation*. Boston 16: Plays, Inc. 1957. 208 pp. \$3.50. Ideal for elementary, junior or senior high school, these ten royalty-free, one-act plays are amusing, exciting, and inspiring for young people, their parents, and their friends. Ranging from a stirring pageant which dramatizes the highlights of the long struggle for human rights ("Calvalcade of Human Rights"), to an amusing comedy of life in a girl's school ("Midge Rings the Bell"), the plays are full of drama and action. Especially suitable for the musical program in commencement week is "Sing, America, Sing," a dramatic presentation of America's heritage through its songs. All of the plays in this collection have been produced successfully in promotion and graduation activities. Suggestions for the simple settings and inexpensive costuming are included.

KELLER, WERNER. *The Bible as History*. New York 16: William Morrow and Company. 1956. 478 pp. \$5.95. This book has been a best seller throughout the western world. The translation for American readers was done by the prominent Biblical scholar, Dr. William Neill. For centuries the Bible has been accepted as the story of man's salvation, but only in recent years have scientific discoveries documented the great book as magnificent history. From the Nile and the Jordan, the Euphrates and the Tigris, the Dead Sea and the Mediterranean, Dr. Keller has gathered an overwhelming mass of evidence that, step by step, reveals the historical foundations of the Old and New Testaments. Never before has this almost incalculable fund of scientifically attested material been made available to the general public.

KENNEDY, J. F. *Profiles in Courage*. New York 20: Pocket Books, Inc., 630 Fifth Ave. 1957. 256 pp. 35c. This is a book about courage and patriotism. It tells the dramatic stories of a number of American politicians of various political and regional allegiances whose one over-riding loyalty was to the United States and to the right as God gave them to see it. They range from born aristocrats to self-made men—some well-known, some almost forgotten. All of them, in the face of dreadful consequences, exhibited a special kind of greatness. These stories remind one that there is, in addition to a courage with which men die, a courage by which men must live.

KEYES, F. P. *Blue Camellia*. New York 18: Julian Messner. 1957. 432 pp. \$3.95. The author has chosen Louisiana as the scene of a major novel.

But this is not a festive chronicle of Carnival in New Orleans, or a saga of the River Road, as rich in sugar, oil, and tobacco as in romance. It is the story of pioneering men and women and their children in a section of Louisiana far too often overlooked. Above all, it is a story of the great love and unswerving loyalty which illuminated the lives of Mary and Brent Winslow, of their daughter Lavinia, and of the two cousins, Claude Villac and Felix Primeaux, who were rivals for Lavinia's heart and hand.

An unseasonable blizzard was raging in northern Illinois when Brent Winslow, convalescing from near-fatal pneumonia, and Mary, his hard-working and overburdened wife, chanced upon an advertisement in their local paper which set forth the opportunities offered to settlers in a balmy and fertile part of southwest Louisiana. Uprooting themselves from their home, they reached Crowley—a "city" which so far existed largely in the active minds of strong-willed promoters—in time for the historic auction of February 1887, at which "house lots" and adjacent "farm lands" were sold for the proverbial song. A few "Cajun" settlers had already homesteaded on the otherwise uninhabited prairie and they clung to their mother tongue and their primitive ancestral customs. Among these were the Villacs who, despite the differences of background and religion, became the Winslows' nearest neighbors and dearest friends.

KIDGER, HORACE, and W. E. DUNWIDDIE. *Problems Facing America and You*. Boston 17: Ginn and Company. 1956. 644 pp. \$4.32. In this high-school textbook, the authors have brought together accurate, up-to-date material pertinent to vital problems facing all Americans today and in the immediate future. The contents are grouped into four units. The first is entitled "Democracy and You"; the second, "Problems Involving Economic Life and You"; the third, "Problems Involving Society and You"; and the fourth, "Problems Involving Our Government and You." It is true that almost no problem can be correctly termed purely a psychological, economic, social, or governmental one. Each problem, on the contrary, represents a combination of elements from these categories. Nevertheless, each problem tends to have predominating elements. The family, for example, is primarily a social and psychological problem rather than a political one. The problem of consumer prices and money, though having important political and social implications, is chiefly an economic one. Accordingly, the predominating characteristics of a problem have determined its unit placement.

This organization, although logical, need not be followed rigidly. The compelling interest of the students, generated by special events or conditions, may call for the introduction of a given problem at a point earlier or later in the course than that suggested by its order in the text.

Each problem has been approached in the light of present-day developments. Throughout, the book makes use of the latest available statistics and data. Each problem is presented from today's vantage point, with attention directed to emerging trends and interpretations. Chapter 5, "The Farm Situation," offers a good example of this treatment. It uses up-to-date figures in presenting the problem of the farmer's high costs and declining income. It reviews the results of government programs of support up to the present and presents such proposed new solutions to the farm problem as the soil-bank program.

Some other instances of the timeliness of the book's content may be found in the chapters on "Consumer Economics" and "The Labor Situation." Discussed here in their present-day proportions are such vital topics as installment buying in the United States, the size of the consumer debt, trends in the

expanding American economy, and the merger of the AFL and CIO. Developments to date in using atomic energy in war and peace are treated in an entire chapter, "The World Faces the Atomic Age." In this chapter the student is brought face to face with the largest complex of new problems that must be solved in the years ahead.

The exercises and activities for the student are a strong feature of this text. Of special importance is the activity page within each chapter entitled "What You Can Do About (the problem of the chapter)." These exercises direct students toward specific action involving the class, the family, or the community. They bring the problem of the chapter directly to the doorstep of each student. Another valuable feature is the section at the end of each chapter headed "Government in Action." This heading introduces a series in the chapter. The student may find the answers to these questions in the text of the chapter or in the parts of the United States Constitution to which reference is given. Especially valuable among chapter-end activities are the annotated reading lists.

The book is full of charts, graphs, diagrams, photographs, and maps. All graphic material is thoroughly up to date and is closely keyed to the text. Color adds to its effectiveness.

This text stresses the great advantages offered by our democracy and the obligations placed upon its citizens. It focuses attention repeatedly upon the necessity for voting by those eligible. The dangers of war and the efforts we are making to ensure peace are strongly presented in the chapter on international relations. Through this chapter and the unique concluding chapter, "The World Faces the Atomic Age," the authors have sought to make students more keenly aware of the urgent need for clear vision and sober decisions in today's world.

A series of unit, semester, and final tests to accompany this book has been prepared. These may be ordered from the publisher at a small charge in any quantity needed.

KINGSBURY, R. F. *Lookout Tower*. Caldwell, Idaho: Caxton Printers. 1957. 254 pp. \$3.50. Margaret Adams, almost eighteen and inexperienced, achieved one of her great ambitions when she was allowed to serve for the summer as a Forest Service guard at Stampede Lookout Tower in the Snoqualmie National Forest some fifty miles from Puget Sound. She was able to secure the job because men were unavailable that particular year.

Her parents had many misgivings about a girl of her age taking so responsible and even so hazardous a position. But she finally overcame their objections by consenting, with the approval of the Forest Service, to take along her young brother, Dick, fourteen. Dick was to act as bodyguard, warding off human "wolves" in the form of good-looking forest guards, and any other dangerous characters found lurking in the vicinity of the tower.

Margaret, petite, blonde, blue-eyed, and an apprentice, grows competent and self-reliant under the emergencies of her job. She spots fires, extinguishes one near the tower, and holds a murderer at gunpoint until the sheriff arrives. Her motto is, "A job well done," and her resolve is to be the best guard in the district.

Being the guard, Margaret must remain close to the tower, but brother Dick is free to roam at will, and this he does avidly. His adventures with nature, Indians, and wild animals are exciting and dangerous, and his presence at the tower as additional personnel is fully justified when he saves the life of a man whose body has become trapped under a bulldozer. Also, because of his

acquaintance with the territory, he ably assists his scoutmaster in bringing out an entire scout troop almost hopelessly surrounded by a blazing forest fire.

Boots, Dick's dog and constant companion; Cupid, a fawn orphaned by accident; and Croaker, the only frog in literature to have Forest Service experience, play roles in the narrative. There is a mild romance between Margaret and Ken Scott, a forest guard.

KJELGAARD, JIM. *Outlaw Red*. New York 36: Teen Age Book Club, 33 West 42nd St. 1957. 160 pp. 25c. The story of two fugitives—a prize winner and a boy.

KJELGAARD, JIM. *Wildlife Cameraman*. New York 11: Holiday House, 8 W. 13th St. 1957. 218 pp. \$2.75. The author adds a new dimension to the ever-appealing combination of boy and dog. This time the boy is a camera fan, determined to be a really good nature photographer. Without being too technical for the uninformed, the author has made wildlife photography an integral part of his story. The happy result is a fresh kind of outdoor adventure, and one that stimulates interest in the fun of hunting—with a camera.

KRAELING, E. G. *Bible Atlas*. Chicago 80: Rand McNally and Company. 1956. 485 pp. (7" x 10"). \$8.95. This truly great work has more than 400 pages of completely new, exceptionally beautiful maps, authentic and highly interesting text, and the finest photographs and illustrations available, to depict hundreds of places discussed in both the Old and New Testaments, and to tell of their significance in Biblical history. Forty pages of completely new, beautiful, full-color maps, including 18 double-spread maps, clearly show the geographical divisions and changes in the ancient world from the days of the patriarchs to the time of Paul.

This handsome volume creates an authentic, contemporary picture of the geography and history of the entire Bible to increase everyone's appreciation and understanding of the Holy Scriptures. In this comprehensive work, every effort has been made to follow the arrangement of the books of the Bible and yet maintain as logical a chronology as possible to place historical events in their proper time periods. Years of intensive research into the best original sources by the noted scholar and Biblical authority, Dr. Emil G. Kraeling, with new information from the Dead Sea Scrolls, make this a remarkable work.

More than 300 of the finest photographs available were especially secured from all parts of the world to show significant Biblical sites and points of interest. Distinctive, original illustrations by artist Sue Allen symbolize the art and culture of the ancient world. Invaluable, time-saving charts include explanations of Biblical names and a chronological outline of history. Fifty easy-to-read black and white maps show vital areas in large detail to highlight specific events such as the Battle of Jericho. There are floor plans and facades of ancient buildings based on reconstructions by noted archeologists. Photographs of recent archeological excavations that have uncovered important findings about the Bible are featured.

KUBECK, JAMES. *The Calendar Epic*. New York 16: G. P. Putnam's Sons. 1956. 318 pp. \$3.95. This is a novel of the sea and of a ship, the *Calendar Epic*, and her first and final voyage in the dark war years when, if a merchantman completed one mission, she was considered to have fulfilled her purpose. The glory went to those who met the enemy in battle, but the tensions and strains fell just as strongly on the men who delivered the machines of war in tens of hundreds of cargo vessels—and if they went down with their ship, well, that was their job.

It is the story of all of them, from veteran Captain Quinn, a company man for so many years that he could no longer put his men or his ship herself above the good of the company, down to Jerry Pegram, the young cadet who had fled a college campus to escape his mother's apron strings. In between are many other shipmates—Junior Third Mate Alcoa, the intellectual who for a false ideal sacrifices the girl he loves, the friendship of the others in the crew, and even his life; the other, Sullivan, who is just the opposite, and who wins the girl he loves; Warren, the Purser, driven from his sinecure ashore by a memory; Ramsdell, who cannot forget the violent days of the Thirties when the American sailor was the lowest form of human life to most of his countrymen; and, finally, the men of the fo'c'sle, as rough and hearty a band of sailors as ever sailed the seven seas.

KULSKI, W. W. *The Soviet Regime*. Syracuse 10: Syracuse University Press. 1956. 861 pp. \$10. Already established in its first edition as one of the most important books concerning the Soviet Union, this book adds another valuable feature in this enlarged edition. A new chapter analyzes the Soviet policies enunciated by the 20th Congress of the Communist Party, which took place in Moscow early in 1956. It also evaluates carefully the meanings of the down-grading of Stalin, rehabilitation of his victims, emphasis on collective leadership, "reform" of working hours and wages, adoption of free and compulsory secondary education, and the Communist campaign for the favor of the uncommitted nations.

Much is said and written about the evils of Communism, but relatively few Americans have a clear picture of life as it is lived behind the Iron Curtain. In this book the picture becomes clearer; it is not an enticing picture, but every person who believes in personal freedom should be familiar with it.

One of the basic claims of Communism is that workers and peasants own the means of production and the land; consequently, as owners they are to be favored by the rulers who act for them. As a theory of government such an arrangement has a tremendous appeal to the common man, an appeal that has met with an enthusiastic response in many parts of the world. But, how does the theory work out in actual practice?

The author answers this question by letting the Soviets speak for themselves in quotations from their own published sources. He analyzes these sources, makes comparisons, and draws his conclusions exclusively from Soviet documents.

LAKLAN, CARLI. *The Candle Book*. New York 16: M. Barrows and Company. 1956. 190 pp. \$3.50. This book answers questions on how to make candles, how to decorate them, and how to turn this easy, entertaining craft into a profitable home business. Every step, from start to finish, is described in detail. There is complete information on the kinds of wax available, the size wicks to use, the right coloring for different types of decor, the molds which are most successful for the many different types of candles suggested. Milk cartons, coffee cans, even egg shells can be used!

Whether you make your own candles or buy them, you will find the section devoted to candle decorating particularly interesting. Any department store, novelty shop, or dime store presents a wealth of material to work with—from sequins, glitter, and artificial flowers to paper clips and upholstery nails! And each of the author's suggestions serves as a springboard for many more ideas.

The use of candles in decorations for special occasions is treated. There are fresh and original designs for Christmas, birthdays, anniversaries, holidays and parties of every sort—and an important chapter on the use of candles in flower arrangements.

LANCASTER, BRUCE. *Roll Shenandoah*. Boston 6: Little, Brown, and Company. 1956. 328 pp. \$3.95. It was July, 1864. Deep in the Shenandoah Valley of Virginia, there would shortly begin a struggle which could give the advantage in the Civil War to either side. Opposing the veteran campaigners led by the South's Jubal Early was a dispirited collection of Union troops. But they would be caught up and set ablaze by the whirling drive of a fresh leader, the diminutive general from Ohio named Philip Sheridan.

The young, disabled veteran Ellery Starr, former officer of Union Artillery, was an old hand at fighting battles but new to the task of reporting them. Battle injuries had abruptly ended his military career, but in his determination to see the Union cause to victory he had signed on as war correspondent for the New York *Tribune*. His assignment: the Shenandoah Valley.

Caught in Chambersburg during the Confederate burning of the city, he met the gallant and daring Southern cavalryman, Major Harry Gilmor, whose cross-the-lines friendship was to mean much to Ellery in critical moments to come. As he watched the sleepy little Pennsylvania town go up in smoke, he also encountered a strange pair he had seen before, the fanatical lay preacher Joseph Westlake and his enigmatic daughter, Gillian, whose haunting voice and provocative gait did not seem to go with her prim style of dress and shyly downcast eyes.

The battle for the valley was to be fought on other fronts than the strictly military one. Ellery learned of organized attempts to sabotage the Union effort, to demoralize the troops and bring about wholesale desertions. He noted that Westlake seemed consistently to turn up at the worst trouble spots. But he was relieved to find that Gillian had become separated from her father. As far as Gillian was concerned, Ellery could feel his reporter's objectivity rapidly leaving him.

Through Ellery's eyes we see the blazing scenes of the struggle—Sheridan on his famous ride from Winchester, urging his tired men on to victory; George Custer, with his flowing yellow hair; the newspaper correspondents who accompanied the troops into battle, armed with pencils and writing pads; the deserters and looters from both forces, adding to the woes of the hard-hit civilian population; and the battery called "Barnum's Museum," with its lieutenants Nassbaum and d'Astier, and its mascot, the goat Rosebud.

LEINHAUSER, R. D. *A Holiday with Eric*. New York 3: Ives Washburn. 1957. 188 pp. \$2.95. This is an especially heart-warming story about three young people who spend a wonderful summer having fun, but who also learn something about living away from home and turning strangers into friends. Since Pam and Diana, aged nine and twelve, had always lived in a city, the summer spent visiting their grandmother in a small town offered enchantments and adjustments. Her big old house contained not only priceless antiques, but a marvelous attic filled with treasures, and a whole room devoted to a wonderful doll collection. All of this is theirs to explore and play with as well as a big barn, the family's original log cabin, and a complete doll house.

LEWIN, WILLIAM, and ALEXANDER FRAZIER. *Standards of Photoplay Appreciation*. Summit, New Jersey: Education and Recreational Guides, 10 Brainerd Road. 1957. 168 pp. \$4.75. This is a general introduction to photoplay appreciation. Although it is primarily a textbook for junior and

senior high schools, it will be useful also in teacher-training institutions and colleges. It is designed to raise standards of discrimination in the selection of movie entertainment.

The test is an outgrowth of pioneer curriculum units prepared by William Lewin for the National Council of Teachers of English and tested throughout the nation in a controlled experiment conducted a generation ago. The findings were reported in the Council's Monograph No. 2, *Photoplay Appreciation in American High Schools*, published by Appleton-Century in 1934. The publication of the present text is, in a sense, a continuation of the original effort of the NCTE to raise movie standards. It is hoped that the new text will help to educate the rising generation to demand better movie fare.

During the past 22 years, the discussion of movies has gradually become an established part of the curriculum of American high schools. Many high schools now show 16mm versions of theatrical features during or after school hours as a phase of the audio-visual program. Some elementary schools show features in their auditoriums as a phase of training in audience behavior and in proper use of leisure time. Schools co-operate with theatres to build better movie habits.

To stimulate the upward trend in the photoplay-appreciation movement, Dr. Lewin has published since 1929 some 250 guides to the discussion of photoplays, with a total circulation of about 10,000,000 copies. These constitute a periodical called *Photoplay Studies*. They serve as current supplements to this basic text, as do the filmstrips.

LEWIS, GRISELDA. *A Picture History of English Pottery*. New York 11: Macmillan Company. 1956. Unpaged (8½" x 11"). \$5.95. English pottery is one of the most popular and rewarding fields for the collector. Its history, however, is a subject to make even the specialist despair, for, though almost every pottery firm has its roots in the past, and every piece of English pottery has some kind of historical connotation, the documentary evidence is pitifully small. The collector or student has to trust largely to his own eyes: it is only by constant observation and comparison that he can get 'the feel' of good pottery, old and new.

This book makes a fresh contribution to the study of pottery since it affords a wealth of pictorial documentation such as no comparable survey has yet attempted. Over 650 different pieces are illustrated, and a very high proportion of them have not hitherto been reproduced in a general study of this kind. More than a quarter of the photographs were specially taken for this book, which brings together a range and variety of illustrations which can only otherwise be found scattered through a number of standard works published at much higher prices.

Although the author—a student and collector of English pottery for many years—does not claim that her text makes more than a few original contributions to ceramic history, her differentiations of the processes and styles, her clear identifications and her succinct descriptions should be of value to all students and collectors. There is not the usual over-emphasis on museum pieces of exceptional rarity. This book illustrates and describes a wide range of lesser pieces which have aesthetic and historic value, but are still to be found, at reasonable cost, by the enterprising collector. Adequate attention is given to the colorful and curious Prattware, to Victorian chimney-piece ornaments, and, most notably, to the studio productions of the late Victorians, Edwardians and artist potters of today, many of whose works will be the collectors' pieces of tomorrow.

LODER, DOROTHY. *The Land and People of Belgium*. Philadelphia 5: J. B. Lippincott Company. 1957. 125 pp. \$2.75. Belgium, a land only slightly larger than the state of Maryland, lies without natural boundaries at the crossroads of northwestern Europe. Invading armies, from the legions of Julius Caesar to the storm-troopers of Adolf Hitler, have turned this little country into a battleground. But the Belgians have restored the beauty and strength of their country after each internal division or foreign invasion to resume their important place among the European nations.

In this book, we read of cities like Ghent and Bruges, which were among the first in Europe to free themselves from feudal dominance. Belgians have always believed that "the air of the town makes a man free," and the development of industry, craftsmanship, and the art, of which Belgians are justly proud, is closely connected to the growth of these free cities. Peter Breughel, Jan van Eyck, and Peter Paul Rubens are only a few of the great painters whose work flourished in the distinctly urban Belgian culture.

MACINTYRE, DONALD. *U-Boat Killer*. New York 3: W. W. Norton. 1957. 253 pp. \$3.75. "Bulldog Drummond of the Atlantic" was the name given to Captain Macintyre for his exploits during the struggle against the most deadly menace to Britain's survival—the U-Boats. In four unrelenting years, he fought a dozen convoys through the wolf pack blockade. He captured Germany's greatest famous submarine ace in a single savage night. He suffered the strain of constant contact with the enemy to the extent that it was a "rest" to help the United States Navy set up an Atlantic front-line headquarters. Returned to the battle in command of a striking force of destroyers, he emerged finally as the Royal Navy's most successful surviving U-Boat killer. For his magnificent wartime exploits, he was awarded three DSO's and a DSC.

MACMILLAN, CYRUS. *Glooskap's Country and other Indian Tales*. New York 3: Oxford University Press. 1956. 279 pp. \$3.50. The Canada of these stories is a wonderland where magic prevails and marvels abound among the animals and Indians that peopled its forests and plains before the white man came. The collection begins with stories of Glooskap, the supernatural hero of the Micmacs of Eastern Canada, and moves west over the prairies to the Pacific coast. We are told how Glooskap intervened in the affairs of his people, how Turtle came, how Rabbit tricked his neighbors, and how the raven turned black. Other stories give mythical explanations of such mysteries as how summer came to Canada and how fire was brought to the Indians.

These are tales that reflect the atmosphere of the land and the dignity and imagination of the people that gave them birth. Retold by a gifted storyteller in simple, rhythmical language, they also have those literary qualities that belong to myths and legends of lasting value. But above all they are good stories, and those who read them once will want to return to them again and again.

MADDUX, RACHEL. *The Green Kingdom*. New York 20: Simon and Schuster. 1957. 571 pp. \$4. Five men and women embark on an adventure for which nothing in their experience has prepared them. They have only their intelligence and courage to guide them. The five are: a famous composer whose third symphony is unfinished; a young printer who feels he has a mission; his wife, who wants above all to have children; his assistant, whose flaw is kindness; and a young girl who is beautiful and completely selfish.

This is their adventure: Unbelieving but curious, they follow an old map showing the way to the Green Kingdom, a secret place in the Rockies—"a kind of geological fault, a bubble formed in the earth's surface when it was molten."

In the mountains at the point marked on the map, a cleft opens before them.

They enter it, slipping from the familiar into a totally strange terrain. There are no people here. No tools. Not even recognizable plants or animals. The Green Kingdom has its own botany and zoology, its own colors, its own climate, its own natural laws.

As they explore, frightened and entranced, hearing the songs of unfamiliar birds, daring to eat never-before-tasted plants and drink unknown liquids, each of the five is seen and measured with a startling clarity. Soon they know that the legend of the Green Kingdom is true. The cleft in the mountains will not open again for ten years. This is the story of what happens to the five adventurers during those years: how their children are born; how they tame strange animals; how they name places and days and seasons; how love and jealousy and hate grow; how a symphony is finished; how a man is killed; what happens when, at last, it is possible again to return to the familiar world.

MALKUS, ALIDA. *The Sea and Its Rivers.* Garden City: Doubleday and Company. 1956. 221 pp. \$2.75. The ocean and the great "rivers" or currents that sweep through it are among the most mysterious and fascinating fields of exploration left to man on this planet. In this book the author explores and takes the reader with her. Together they discover the geography of the ocean floor, where there are canyons deeper than any found on dry land; follow the sweep of the great ocean currents like the sixty-million-year-old Gulf Stream; meet the inhabitants of the deep—the great living "meadows" of plankton, the killer whale; and learn the lore of underwater research, including a description of Dr. Beebe's dramatic first descent in history into the sea.

And such intriguing facts come to light during their journeys! A single hurricane spends as much energy as 30,000 atom bombs. The tiny hummingbird flies 500 miles across the Gulf of Mexico while migrating. Eels swim the Atlantic from ponds in Europe and America to lay eggs in the warm Sargasso Sea. The book ends fittingly with a tribute to the miracle of water and a summary of the bounty the sea offers to men.

MANNIX, MARY. *Lee Devins Copywriter.* New York 18: Julian Messner. 1957. 187 pp. \$2.95. When Lee Devins arrived in New York and became part of the fascinating bedlam of retail advertising, she had no idea her career would be so dramatic. Almost at once she was involved in an office mystery which threatened her reputation, placing her entire future in jeopardy.

It wasn't easy to get a job as advertising copywriter. After many painful interviews Lee realized bitterly that employers wanted the impossible—girls her age but with twenty years experience! Finally, she became a trainee at Chapin's department store and began the bewildering adjustment to high-pressure business. Yet the very excitement sharpened her wits and brought its own rewards.

More deeply rewarding was the love of Hal Morgan, a young free-lance artist who worked at a competitive store. He was both a cheerful and steady influence when Lee worried over deadlines and her lack of experience in this world where no one seemed to have the time to show her the ropes. It was months before she was actually allowed to write copy, but her first attempt was selected for a full-page ad. But she made mistakes too. Golly, just one mistake in describing merchandise could result in heavy fines and bring down the wrath of the Federal government! Then strangely Lee became involved in an office mystery. In devious ways it was made to seem that she was careless, even dishonest. Fearfully she baited a trap that might boomerang to her own disaster, but it was a chance she had to take.

MARSHALL, CATHERINE. *Julie's Heritage*. New York 3: Longmans, Green and Company. 1957. 239 pp. \$3. Was it wrong to crave friendship and acceptance as an individual, not as a member of a race? The two had to be bound together. What Julie did would reflect back on all dark-skinned people. She had to choose her approach to society but Julie wanted to be sure it was the right one.

George chose. His way was toughness: he bullied until everyone feared him. Lorraine chose, beautiful Lorraine whose hair was soft and whose skin was almost white. Her way was escape. Marilyn chose by quietly withdrawing. David—athletic idol and the only boy to light Julie's eyes—chose defiance, the "I'll show 'em" attitude.

But this could never be Julie's way. Julie bore the hurts, drove bitterness from her. "Live so that they can see your worth," her father had said. And with a gifted singing voice that softened her listeners, brought them together and lifted them high in spirit, Julie found that she could do much for her people. This was Julie's way and she would follow it with verve, for hers was a goodly heritage: to be true to one's race is actually being true to oneself.

MASTON, T. B. *Christianity and World Issues*. New York 11: Macmillan Company. 1957. 384 pp. \$5. Basic social factors—the family, race relations, economic and political life, communism and war—are approached by the author with a definite Christian orientation. Persistently and continuously certain questions are asked of the church and by the church. What should be the relation of the church to the world? What contribution can and should organized Christianity make to the solution of the problems of the world? This author goes far in answering these questions for ministers and Christian laymen, in the deepening crisis that is gripping the world. Scholarly answers combine history, theology, and sociology with useful recommendations.

MAUGHAN, A. M. *Harry of Monmouth*. New York 16: William Sloane Associates. 1956. 440 pp. \$4.50. Henry V of England is known to millions as Shakespeare's spirited young Prince Hal. Now a talented writer has reconstructed all of his short, dramatic life, from the appealing child who did not wish to be King to the complex adult who set England on the path to greatness and kept her there through genius, leadership, and love. All the memorable events of Henry's reign come alive, and the people who surrounded him—the lusty, ambitious men of Lancaster; the troops who loved him; the plain people of London; and the elegant nobles of France. Harry of Monmouth was many men in his brief 35 years—the rowdy youngster who scandalized the court; the brilliant young fighter who kept Glendower barricaded in his own wild Welsh mountains; the dedicated ruler; and the constant lover.

Each of these roles he played to the hilt; each side of his many-faceted personality is put before you in this sparkling evocation of his times. And his great victories in battle have here the immediacy of contemporary reporting. Standing in the present and looking back on Agincourt, where 6,000 ragged British troops defeated 42,000 French, the author makes this moment in history as real as a battle in the Pacific today.

Henry fell in love just once, with Lady Katherine of France. He saw her portrait years before they met and she was all his life a fairy-tale princess. In his thoughts he named her Greensleeves, his own fair Kate, and, thenceforth, no other woman existed for him.

MCINTOSH, D. S. *Singing Games and Dances*. New York 7: Association Press. 1957. 124 pp. \$3. Frolicking get-together fun for everyone . . . 56 delightful and easily learned singing games and singing dances . . . every one

of them a living part of our American heritage. This group of folk games and dances was chosen for their gay simplicity and originality from the author's vast collection of native Middle West Americana. Many have never before appeared in book form and all are adapted for modern use by modern folk. Even a beginner can join the sets or act as a caller after a single reading of the clear directions for each game and dance.

Phrases related to these traditional game and dance formations and to the actions and figures used in them are described in the beginning of the book. Contents are arranged conveniently by type of formation: 24 single circle games; 5 double circle squares; 2 triple circle squares; 8 singing squares; 7 contra formation games; and 10 irregular formation games.

MERRETT, JOHN. *Famous Voyages in Small Boats*. New York 10: Criterion Books. 1956. 188 pp. \$3. These tales of the sea begin in many ways—some with shipwrecks, mutinies, or rescue missions; others with important theories to be tested—or simply in response to adventure's own wild, lusty call! Each tells a true story of man's heroism against odds; each is as powerful, as breathlessly exciting as the sea itself.

Here are six fascinating accounts of some of the most dangerous voyages ever undertaken by men in small boats: Joshua Slocum's famous around-the-world voyage on the *Spray*; William Bligh's 3600-mile sail in a long boat after the mutiny on the *Bounty*; the wanderings of the lifeboats of the shipwrecked *Trevessa*; Thor Heyerdahl's fabulous experiment across the Pacific on a nine-log raft, the *Kon-Tiki*; the heroic Antarctic sail of the 20-foot *James Caird*; and Alain Bombard's perilous journey across the Atlantic in *L'Heretique*, a tiny rubber dinghy. These fast moving accounts will stir the imagination of every young reader.

MERRIAM, R. E. *The Battle of The Bulge*. New York 3: Ballantine Books, 101 Fifth Ave. 1957. 190 pp. 35c. This book—based on German and Allied sources—is the true story of an amazing battle. This battle was Germany's last desperate bid for victory in the West. From the time when Hitler first conceived the plan for the Ardennes offensive to the day when the last, isolated Panzer units were destroyed, here are the details.

MERRILL, MARY, and M. F. LOEW. *The Week-End Cookbook*. New York 16: Coward-McCann. 1957. 255 pp. \$4.95. This is the first cookbook that has been written in some time with a new and original idea behind it. Basically, it is a year-round guide to week-end entertaining. It gives menus and recipes for weekends during every season of the year and shows how to plan ahead so that entertaining can be less work and more enjoyment.

For the countless people who like to have weekend guests, this book is the perfect answer to all the problems and questions that arise. It has been designed specifically for the weekend hostess, giving menus and recipes for dinners, brunches, lunches and cocktail parties. The book is divided into four sections: Spring, Summer, Autumn, and Winter. There are four weekend dinner charts, one for each season of the year. Each chart includes four planned weekends with dinners for Friday, Saturday, and Sunday. Most of the Friday dinners may be served buffet style, and the Sunday dinners may be served indoors or out, depending on the season. There are four additional menu charts for brunches, lunches, cocktail parties, and dessert coffees which are also seasonal. Cooking and storage space has been considered for the hostess who wishes to prepare ahead for the whole weekend. The foods chosen have been planned for seasonal marketing, thus aiding the budget. Each menu is followed by the recipes it contains, which prevents the reader from having

to turn backwards and forwards throughout the book. Every recipe and menu has been kitchen-tested by the authors under actual circumstances.

Most of the recipes included may be prepared ahead and the book specifies exactly how this can be done on a time schedule. There is a list of ingredients in each case, and the necessary utensils are also indicated. Step-by-step preparation instructions are simple and direct enough for the beginner, but the actual recipes themselves will satisfy the most discriminating guest. Seventeen basic recipes are included separately in the cookbook.

This book has been arranged for entertaining six people, and it is completely practical for any cook who wishes to produce gourmet results easily. The most difficult part of entertaining is often the actual planning rather than the cooking itself. This book, by the use of the menu charts and a system of planning, enables any person to plan ahead and be able to look forward to weekend entertaining with the knowledge that most of the work has already been done.

MERTON, THOMAS. *The Silent Life.* New York 3: Farrar, Straus and Cudahy, Inc. 1957. 192 pp. \$3.50. At a time when the monastic life is experiencing its most remarkable revival since the Middle Ages, the author has written a fascinating account of all the branches of the monastic family. After first answering the question, "What is a monk?" he describes the two main classes of monks—the cenobites, those who follow a communal life; and the hermits, those who live a solitary existence. In the former category are the Benedictines and Cistercians, and in the latter the Carthusians and Camaldoleses.

This is the first book of its kind to appear in English, and no one is better qualified than Father Merton to write it. It will satisfy something of the curiosity of those who have heard the admirable recordings of Gregorian chant by the monks of Solesmes and who want to know more about the Benedictines. It tells also of the Primitive Benedictine Observance, which is just beginning to exist in America. It presents the Cistercian ideal, which is that of the Trappists, with illuminating insight. It gives a detailed account of the spirit of the Carthusian hermits, the most solitary and austere order in the Church. Finally it brings to light the almost unknown order of the Camaldoleses hermits, who have kept alive perhaps more perfectly than any other group the spirit and observance of Oriental monasticism in the Western Church.

MICHENER, J. A. *The Bridge at Andau.* New York 22: Random House. 1957. 285 pp. \$3.50. There was a bridge at Andau, and if a Hungarian could reach that bridge, he was nearly free. By an accident of history, one of the most inconsequential bridges in Europe became one of the most important bridges in the world. Across it, during a few flaming weeks, fled more than twenty thousand people who had known communism and rejected it. In these few weeks the world learned with a dreadful clarity how bankrupt communism had become as a system of government.

The author was at that bridge, which is in Hungary near the Austrian border. He personally helped lead many Hungarians out of their suffering, gallant country. From what these victims of Russian bestiality told him, he has drawn a picture of Hungary under Russian domination, up through the final terror of the rape of Budapest and its aftermath.

This is the story of the revolution told in terms of the people who lived it—the writers and philosophers who proposed it; the students who initiated it; the boys and girls who wrestled with tanks barehanded; and the workers, the

propaganda darlings of communism, who resisted both communism and Russia to the death.

MIERS, E. S., editor. *The American Story*. Great Neck, New York: Channel Press, 159 Northern Blvd. 1956. 352 pp. \$5. This book is the work of sixty leading American historians—Pulitzer prize winners, Bancroft award recipients, leading educators, authors and editors—each represented with a chapter on the person or period in America's past that is the contributor's particular field of interest. The sum of this hitherto-unpublished material is a history of the nation from the time of the Viking explorations to the era of the Cold War. The book is illustrated with drawings, photographs, and contemporary cartoons.

It is a uniquely informal, anecdotal volume. Reading it is somewhat like conversing with each contributor, and hearing each in turn describe the outlines and dimensions, the features and facts of the American story. At times the focus is on men who shaped the nation: Carl Bridenbaugh on William Penn, Thomas J. Wertenbaker on Benjamin Franklin, Dumas Malone on George Washington, Bruce Catton on Grant and Lee, Frank Freidel on Franklin Roosevelt.

At other times the writers' viewpoints are events and the collision of concepts: Claude G. Bowers tells of the Alien and Sedition Acts, Carl Carmer relates the building of "Clinton's Ditch," Allan Nevins delineates the "Age of Enterprise," Agnes Rogers Allen discusses the changing status of women, Waldemar Kaempfert analyzes the effects of the Atomic Age. This book is a book for those many Americans who seek in one volume the many-faceted story of this country.

MIERS, E. S. *Mark Twain on the Mississippi*. Cleveland 2: The World Publishing Company. 1957. 246 pp. \$3. "Steeammm-boat a-comin'!" Old John Hannick's cry always brought all of Hannibal running, but none came faster than young Sam Clemens. For the Mississippi brought traders and planters, heroes and adventurers, gamblers and slave hunters—all the robust, colorful life of America in the 1840's—to the straggly Missouri town. If he couldn't be a pirate when he grew up, Sam vowed, he would be a river pilot.

But for the time being, Sam and Tom Blankenship, the unkempt river rat Sam's father declared would hang someday, contented themselves with such matters as scaring the wits out of the revivalists at the Western Star Tavern, ferreting out the secret of Cave Hollow, and becoming authorities on sin and the devil. Sam's mother despaired of curbing his exuberance; even after Sam had served his apprenticeship as a printer and was putting out a weekly newspaper with Orion, his sober-minded brother, he still indulged in pranks. But Jane Clemens understood her son, too. "Sammy is like a book that's come alive," she said. "If you tear out the pages where he's a rascal, you spoil the best part of the story."

MILLER, JOSEPH. *Arizona: The Last Frontier*. New York 22: Hastings House. 1956. 360 pp. \$5.50. The stirring, fast-paced account of the wild era in the early days of our youngest state is revealed in contemporary newspaper stories of events as they were reported at the time. Here the reader relives the days of the Vigilantes and their summary justice—mushrooming mining towns, gambling, gunfights, hair-breadth jail escapes, courageous judges, and fighting editors.

Following the reportorial technique that was so successful in his Arizona story, the author has dug into the files of thousands of issues of the early Arizona newspapers from which he quotes the actual accounts. So here is the

picturesque language of frontier newspaper men, more vivid than anything that might be fictionalized. These early editors got their stories "hot off the griddle," either from personal participation or from eye-witnesses. This is the real stuff and no mistake; and the editors, whose sheets were often printed on brown wrapping paper when the overland freighters failed to arrive on time, had a knack for lurid narrative too.

It is not only what these newspapers record, but also the way they have said it, that makes for exciting reading. In those days an editor, who often acted as typesetter and pressman too, minced no words when attacking a rival or the candidate of the opposition party—which, it should be added, frequently led to formal duels. All the billingsgate hurled back and forth makes our modern editorials or campaign speeches seem like polite chit chat.

MITCHELL, BROADUS. *Alexander Hamilton, Youth to Maturity 1755-1788.* New York 11: Macmillan Company. 1957. 691 pp. \$8.75. The first of a two-volume biography, this book describes Hamilton's West Indian birth and boyhood, his war activities, his relationship with Washington and other Revolutionary leaders, and closes with his brilliant championing of the adoption of the Federal Constitution by New York.

After years of study of Hamilton and his times, the author has reached a point of view rather different from the usual one. He regards Hamilton not as an apologist of privilege, but as the champion of the public interest; his client was not a class, but the whole country. Nor did his proficiency as fiscal technician overshadow his broad statesmanship. He devised and applied treasury tools for the noble purpose of constructing and advancing a new nation.

The meaning of Hamilton remains a subject for controversy today. As the author states in his Foreword: "It is idle to speculate concerning Hamilton's allegiance were he able to return to the American scene. Such have been the mutations in times and terms that, with his penchant for employing organized direction, he might now be called not a conservative, but a liberal. . . . Hamilton, as developer of modern resources, has meaning for the modern world in which powerful rival governments contend for the loyalty of backward peoples. He knew how to replace anarchy by organization."

MITGANG, HERBERT, editor and narrator. *Lincoln as They Saw Him.* New York 16: Rinehart and Company, Inc. 1956. 537 pp. \$6. This is a startlingly contemporaneous picture of the great Mr. Lincoln, compiled entirely from original sources, from the North, South, East, West and in Europe, which reveals the real man as seen by enemies as well as friends. The result of the author's painstaking research is the creation of a new Lincoln, less godlike, more vividly human.

Here are on-the-spot accounts of a near-duel in his youth (an incident of high comedy), the Lincoln-Douglas debates, the 1860 campaign, his position during the crisis at Fort Sumter, the Emancipation Proclamation, the Gettysburg Address, and the Second Inaugural. Early letters are included along with contemporary reports of Lincoln visiting his generals, and entering conquered Richmond. Salting the whole is the now-incongruous attitude of those, both North and South, who in his time called him King Abraham or The Ape.

MOORE, RUTH. *Speak to the Winds.* New York 16: William Morrow and Company. 1956. 309 pp. \$3.50. Chin Island had been a wild three miles of rock and forest when it was first settled. Now, seventy years later, the families who lived there were a proud American jumble of Scots, Italians, Portuguese,

and Greeks, chiefly fishermen and farmers. It was Christmas time when the feud began. Elbridge Gilman, who had unwittingly helped to start it, was a calm, kindly man with a deep love for the island and a deeper love for his wife and children. He did what he could to stop the feud from spreading. So, at first, did Liseo MacGimsey, his quick-tempered partner in the fish wharf. But there were others, like Stell, the sharp-tongued postmistress, who fanned the flame until it threatened to engulf the entire island.

MORAN, E. F.; and LOUIS REID. *Tugboat*. New York 17: Charles Scribner's Sons. 1956. 370 pp. \$5.95. The rugged power, the adventure, and the indomitable spirit which tugboating implies are the subjects of this book. The average day in the life of a harbor tug, the duties of the boat and crew, the meals served, the problems encountered, the railroad barges and the giant passenger liners towed, pushed, and nudged into their berths or out to sea form the background in this historical portrait of the American tugboat.

The author, the grandson of an Irish immigrant and the son of Michael Moran, the founder of the Moran Towing and Transportation Company, tells the story of the tugboat from the time when its tows were high masted clippers and coastal sailing vessels to its current work with the giant trans-oceanic liners. The tales of ocean spanning tows, of gallant rescues, of tugboat activities during four wars, which are the heritage of the tugboat industry, are told here by a man whose whole life has been intimately allied with that heritage. His account is full of waterfront personalities, both men and ships, and amusing as well as tragic incidents. It is pervaded, at the same time, by a sense of the importance of the parts which the shipping industry and the Port of New York have played in the growing complexity of world economy.

MORRIS, R. B. *Alexander Hamilton and the Founding of the Nation*. New York 16: Dial Press. 1957. 639 pp. \$7.50. "In this book," writes the author, "Alexander Hamilton is permitted to speak for himself, to present his basic ideas in his own words. A man of eloquence, a facile writer, a powerful polemicist, and an unrivalled master at drafting state papers that have endured, Hamilton, through his correspondence, pamphlets, and reports, has left us a fascinating self-portrait. Herein is found Hamilton the man, the lover, the husband and father, the patriot and the statesman, the man who jealously guarded his integrity but stood loyally by his friends."

In his new book the author considers Hamilton and his role in the founding of the nation in the light of the most recent historical scholarship. Here Hamilton appears, along with Madison, as the advocate of a truly radical program in the Confederation period, but his writings reveal that he never repudiated democracy, although he had reservations about the way it was working, and consistently fought for civil rights. In fact, among his most enduring contributions are his fights for minority rights and for the freedom of the press.

The text is authoritative. It is based on Hamilton's manuscripts in the Library of Congress, his many newspaper articles, including portions of his own major contribution to *The Federalist*, and significant items from unpublished collections only recently opened to scholars.

MULCAHY, R. E., editor. *Readings in Economics from Fortune*. New York 17: Henry Holt and Company. 1957. 160 pp. \$1.95. This book contains a series of 31 articles from *Fortune* magazine. These articles are classified under seven major categories: The Economy: Resources and People (4); The Economy: Institutions (7); National Income (6); The Market (5); Income

Distribution (3); International Economics (3); and Economic Systems and the Future (3).

MULVIHILL, W. P. *Fire Mission*. New York 3: Ballantine Books. 1957. 190 pp. Hardbound, \$3.50; paperbound, 35c. This is a novel of men at war. In the winter of 1944, the Allied armies were slugging it out with the Wehrmacht in the long drive to the Rhine. This is the story of one American artillery battery and what happened to them in the last few weeks of a great battle.

MUNOZ, CHARLES. *Stowaway*. New York 22: Random House. 1957. 240 pp. \$3.50. In his hiding place aboard the *S.S. Silver Hawk*, the Stowaway waits. The old tramp steamer puts out to sea, bound for South America. This is to be a routine voyage, but the hidden man is to make it unforgettable for both the crew and the reader. This is the tense story of the impact made on the lives of all aboard by the disquieting presence of the Stowaway. The excited fears of the eighteen-year-old radio operator who is finding a challenging new world, the terrible self-torture of the second mate who is approaching the end of his old world, and the poignant aloneness of others aboard are intensified through their experience with the Stowaway.

From the moment of his discovery to the time of violence in the port of call, the compelling figure of the voyage is the Stowaway. Drama mounts as the *Silver Hawk* steadily plows the dark ocean toward its fate; and the outer drama is matched by a clash of forces within each voyager as he is affected by the strange power of the Stowaway.

NEIDER, CHARLES, editor. *The Complete Short Stories of Mark Twain*. New York 22: Hanover House. 1957. 702 pp. \$8.95. Here—for the first time—are all of Mark Twain's delightful, humorous, ironic short stories collected in one volume. There are sixty stories in all. They range in tone from the high-spirited "Notorious Jumping Frog of Calaveras County" to the symbolic "The Mysterious Stranger."

It has been said of Mark Twain that a formal scheme was about as appealing to him as a tight collar. So it is not surprising that, whenever Twain prepared a collection, he would mix things up, give them variety, so that his readers might be surprised. Thus fact and fiction, stories, sketches, and articles have been indiscriminately mingled into volumes of adventure, travel, and autobiography. In this way—up to this time—many of his excellent short stories have been neglected and overlooked.

Mark Twain's special genius was his infectious humor—a humor that came from his penetrating insight into the foibles and follies of human nature. This ability to make people laugh (although they might blush at the same time) is found in stories such as "The Man That Corrupted Hadleyburg," "The £1,000,000 Bank-Note," "Extract from Captain Stormfield's Visit to Heaven," and "The \$30,000 Bequest." Others, such as "Cannibalism in the Cars" and "The Stolen White Elephant," while less well known, show Mark Twain, the inimitable American humorist, at his best.

NELSON, MARG. *Storm at Anderson Point*. New York 3: Ives Washburn. 1957. 186 pp. \$2.75. This is a very appealing story of how a girl was able to help her family build a new life. Set against the author's own Pacific Northwest background, all sorts of storms blew up there on the shore of the Columbia River during the spring and summer that teenage Sally spent with her guardian's family. Pretty, gay Sally could not understand why her uncle, as her guardian, insisted she leave her fashionable girls' school to visit them, why he was a fisherman when the family cannery had always been prosperous,

why her seventeen-year-old cousin Chris was on crutches as the result of an accident and treated like a baby by his mother, or why Chris and her aunt showed such bitterness toward her. It was all so different from the happy times she remembered on earlier visits when her mother was alive.

After Sally discovered the answers to all these questions, her efforts to do something about the situation brought her many adventures, some of them funny and some of them spectacularly unsuccessful. Finally, the big storm that wrecked her uncle's fishing boat and their neighbor's sport fishing camp seemed the end of everything for the Andersons.

NICOLL, ALLARDYCE. *The Elizabethans*. New York 22: Cambridge University Press. 1956. 180 pp. \$5. This "picture-document history" gives the feel of the Elizabethan age in a way not possible in an ordinary history book. It puts before the reader a linked and ordered sequence of pictures and passages from the writings of the Elizabethans themselves; both pictures and text show and describe all those things which gave the age its special character and gave the life of the people its special flavour. The author's introductions to each section indicate the pattern and link the items.

Here, first of all, is the nation's hierarchy, from the Queen (a whole section) through all the ranks of her subjects. The universe they inhabited is then described in their terms; from the planets which governed human life to the single elements which made up everything below the moon. The social order comes next, presided over by God's vicar, the sovereign. Then the newly established Church of England; and the centre of the kingdom—London, "noblest city of the now noblest nation." The rest of England follows—its countryside, roads and inns and recreations, its vagabonds, witches, and fairies. Then comes the home and home life: buildings, furniture, gardens. Education, foreign travel, science, medicine, and the arts represent the accomplishments and occupations of the individual. Final sections on the army and navy show the defences thrown round the whole realm, and extending to the newly discovered lands of America.

NOBLE, IRIS. *Joseph Pulitzer*. New York 18: Julian Messner, Inc. 1957. 191 pp. \$2.95. Like a fiery comet Joseph Pulitzer rocketed across the American newspaper world and changed the course of its history. Reporter, editor, publisher, he became the nation's greatest crusader against corruption, fought for and won our freedom of the press.

At seventeen, Joseph Pulitzer, a Hungarian immigrant, arrived in New York without money, without friends and without even a knowledge of English—he had come to join the Union Army to fight slavery. After the war, he tried unsuccessfully to get a job in New York and then hitchhiked to St. Louis where he became a mule hostler, stevedore, waiter, messenger boy—anything to support himself while he studied for the law examinations which he passed at twenty-one.

Impressed by the young man's brilliance and determination, Carl Schurz, owner of the St. Louis *Westliche Post*, hired him as a reporter. Pulitzer's crisp, hard-hitting prose set a new style in news writing, and his insistence on unbiased reporting startled his employer as much as the city itself. As a gag his fellow reporters named him to run as a Republican state candidate in a Democratic district. He won, and what he learned in his battle sustained his headlong, never-satisfied search for the news behind the news.

He bought the run-down *Post* for its AP franchise, merged it with the *Dispatch* and created one of the strongest independent papers in the country. Leaving the St. Louis *Post-Dispatch* in charge of his competent editor, he moved

his family to New York where he bought *The World*. After only two years, he surpassed the circulations of the mighty *Times*, *Tribune*, *Herald*, and *Sun*. Always there was the thrill of exposés, scoops, the flogging passion for truthful, unprejudiced news reporting, a policy of responsibility to the readers. And then at the height of his success, and still a young man, came overwhelming tragedy—he faced total blindness.

This is the dramatic story of an idealistic genius who shaped the pattern of present-day journalism and who left a legacy to the journalists of tomorrow in the famous Pulitzer Prize Awards.

NORMAN, CHARLES. *John Muir*. New York 18: Julian Messner, Inc. 1957. 191 pp. \$2.95. World famous as a naturalist, geologist, writer, and explorer, this "Man of the Mountains," defender of our primeval forests, was instrumental in obtaining vigorous support of the conservation movement and in the establishment of such great national parks as Yosemite, the Grand Canyon, the Petrified Forest, and Mount Rainier.

Even as a boy in his native Scotland, John Muir was fascinated by nature, and when his family came to the United States, settling on a Wisconsin farm, he was delighted by the glorious untouched wilderness which he immediately set out to explore. Young Muir had an insatiable thirst for knowledge and read books on a variety of subjects. He also taught himself algebra, geometry, and trigonometry. Inspired by his grasp of mathematics, his head became filled with projects and inventions, and he made all kinds of clocks, a self-setting sawmill, a mechanical desk, barometers, thermometers. Encouraged by prizes he won at state fairs, he left home and supported himself by selling his inventions and doing odd jobs, hoping to earn enough money to become a physician. At the age of twenty-one he entered the University of Wisconsin to study medicine, but he became interested in botany and geology and abandoned medicine for his life's work—the pursuit of the wilderness and the great outdoors.

NORTH, STERLING. *George Washington*. New York 22: Random House. 1957. 192 pp. \$1.95. You would have liked young George Washington. He was the best horseback rider in Virginia, according to Thomas Jefferson. He was an excellent wrestler, swimmer, fisherman, and duck hunter. From the age of 14 until his death, he enjoyed surveying farms and fortifications. He was interested in the building of canals and the draining of swamps, the breeding of better horses and dogs, and the cultivation of fruit and flowers. In almost everything he tried, he was excellent, with the single exception of writing poetry. The love lyrics he wrote to the girls, most of whom were unkind to him, were so clumsy they were amusing. There was nothing amusing, however, about his bravery. A major at the age of 21, a lieutenant-colonel at 22, the hero of Braddock's defeated army at 23, Washington was a courageous frontier fighter.

O'NEILL, CHARLES. *Wild Train*. New York 22: Random House. 1956. 500 pp. \$6. On a wet April day in 1862 along a stretch of Georgia railroad track there occurred one of the most melodramatic events of the Civil War—the unexpected capture of a locomotive deep in the Confederacy by a party of twenty-two disguised Union raiders and the ensuing eighty-six-mile chase led by a handful of determined and resourceful Southern railroadmen.

This wide-ranging, swiftly paced book reveals the backgrounds of the young Ohio soldiers who followed the man known as J. J. Andrews, how they came to be together on the train that made a breakfast stop that morning at Big Shanty, Georgia, and what actually happened to them then and afterwards.

This book is an exciting narrative of pioneer war by rail, of persistence against fantastic odds, and of a wartime secret service mission directed at a crucial goal. This is as accurate and complete an account of the original raid and chase as can be found in one place, since it is told almost entirely in the words of those on both sides who took part.

PEARL, C. O. *William Penn*. Philadelphia 5: J. B. Lippincott Company. 1956. 448 pp. \$6. William Penn was a man of considerable import in fields of deep concern to us now. He stood for liberty of conscience, the right to a true trial even for "subversives," for freedom of the press, and the peaceful adjudication of all conflicts, including those between nations. He is known to all Americans, yet the complete story of his inspiring and often tragic life has never before been told.

The author first shows Penn as a young Englishman, raised a Cavalier. After studying at Oxford, he came under the influence of the newly founded Society of Friends. His Quaker life divided itself into four distinct phases: the years as a young martyr when he was imprisoned in the Tower and in Newgate; the more or less withdrawn years during which he acted as the spokesman of the persecuted society, writing an almost incredible number of pamphlets; his years as a social administrator when the West New Jersey and Pennsylvania colonies were created; and finally, his return to the martyr's role when he lived under the shadow of a treason charge and when his devotion to the Pennsylvania project reduced him to poverty.

Penn comes to life in these pages. Moreover, we see Penn's circle vividly. The author's delineation of George Fox is masterly. The atmosphere of the 17th century is recreated with subtlety and understanding.

PEARL, R. M. *How To Know Minerals and Rocks*. New York 22: New American Library of World Literature. 1957. 200 pp. 50c. An illustrated guide to important gems, ores, and metals of the mineral kingdom.

PEASE, HOWARD. *The Ship Without A Crew*. New York 36: Teen Age Book Club, 33 West 42nd St. 1957. 208 pp. 25c. Tod Moran solves a South Pacific mystery.

PENCE, M. L.; and L. M. HOMSHER. *The Ghost Towns of Wyoming*. New York 22: Hastings House, Publishers. 1956. 256 pp. (7½" x 10") \$7.50. The 1868 Congress sliced lands from the Dakotas, Utah, and Idaho, and patched them together into a new territory which they called Wyoming—honoring a valley in Pennsylvania where, nearly a hundred years before, the Senecas had massacred some 400 settlers. The name proved to be not inappropriate, for the new territory was to have plenty of Indian troubles too. But although they tell of these events, the authors are chiefly concerned here with a somewhat later period of boom and bust, when towns mushroomed violently overnight only to vanish as quickly when the bubble burst.

In these pages, the special frontier that was Wyoming comes to life in all its violence and licence, its comedy and tragedy. This was what Wyoming was like in those days—fighting, lechery, drunken brawling, but also indomitable courage and dogged will to survive.

The coming of the railroads spawned a number of the towns. Brownsville was one—resounding with the brawling of workers as they built a bridge across the Platte. When the bridge was finished, Brownsville faded. But it was a wild place while it lasted, with a ruffin for mayor, its justice a travesty. Other towns sprang up to meet temporary conditions. Four of them dotted the South Pass; the rip-snorting town of Carbon rose like a rocket, and vanished into obscurity when the local coal mine petered out. Dillon, largest of the copper

camps; Bald City, known as the Town of Broken Hearts; boisterous Benton; turbulent Tubb City; Jireh, which tried vainly to become the cultural center of the Territory—all flamed high only to vanish again. Ghosts today, all of them!

PERSON, TOM. *New Dreams for Old*. New York 3: Longmans, Green and Company. 1957. 192 pp. \$2.75. With a good setting and a heroine of grit and wit, this story of the Mississippi Delta region is a lively one. Caroline Howard, who planned a career in journalism, finds instead she must manage her father's cotton farm. Labor troubles, mechanization, weather, and the complexities common to cotton production had proved too much for Jed Howard, recovering from a stroke.

PHILLIPS, J. B. *The Book of Revelation*. New York 11: Macmillan Company. 1957. 64 pp. \$2. Vivid themes from this last book of the New Testament have the mystery, symbolism, and beauty of "celestial poetry." Symbolic messages, originally intended for the Seven Churches of Asia, are relevant to all Christians, but are usually neglected because of the obscurity of archaic Greek expressions.

The emotional intensity of St. John's ecstatic experiences, coupled with a strange juxtaposition of words, a startling use of idioms and tenses have made this material almost impenetrable for the modern reader. "The crowns, the thrones, the gold, the jewels, the colors, the trumpets, the violence of action, and the impact of incredible numbers and awe-inspiring size—all these images stir that threshold of the brain where monsters lurk and supernatural glories blaze. John is stirring with a kind of surrealistic artistry the vastnesses of our unconscious minds." Without defining all the subtleties or detracting from their beauty the author makes them thrilling and understandable in his own popular style of modern English.

POHL, FREDERICK. *Slave Ship*. New York 3: Ballantine Books, Inc., 101 Fifth Avenue. 1957. 148 pp. 35c. How men first learned the language of the animals—and the startling consequences.

POUSETTE-DART, NATHANIEL, editor. *American Painting Today*. New York 22: Hastings House. 1956. 127 pp. (8" x 10 1/4") \$8.50. Here are presented 155 paintings, chosen from the work of as many artists in all sections of the country—a vivid cross-section of American art of recent years. Of wide representational range and scope, the selections reproduced here will, it is hoped, notably stimulate appreciation of our contemporary art. Through its insistence on a new and higher standard of excellence, this book may also spur creative effort both in amateur and professional circles. As further evidence of its free expression, many of the artists' personal credos are quoted throughout the book. Included, too, are pungent summaries on "Experiments, Developments, and Influences in Contemporary Art" and on "The Artist as Critic," written by the editor from his rich background of experience in painting, writing and teaching. The 155 paintings were selected by an Advisory Committee of 14 distinguished museum directors and curators under the chairmanship of Hermon More, Director of the Whitney Museum of American Art.

RAITT, HELEN. *Exploring the Deep Pacific*. New York 3: W. W. Norton and Company. 1956. 288 pp. \$3.75. It seemed a good idea to the author when the Scripps Institution of Oceanography's Capricorn Expedition planned Christmas ashore on a South Pacific Island that she fly out and spend the holiday with her scientist husband. As it turned out she also joined the oceanographers aboard their ship to continue the voyage through the South Seas. Mrs. Raitt was the only woman aboard, and she has written a lively

and informative, warm and witty account of her experiences. She describes the around-the-clock activities aboard the oceanographic vessel—the scientists at work probing the secrets of the ocean bottom, the waters, and the air above. There are dramatic discoveries of great depths and underwater sea mounts as tall as Everest; of disappearing islands and strange sea life. There are fascinating excursions ashore at romantic Tahiti, the remote Tongas, and the island of Melville's *Typee*. People interest the author and she has a delightful way of describing them—her fellow shipmates, the natives, and the Europeans of the South Seas.

RANDALL, J. G. *Mr. Lincoln*. New York 16: Dodd, Mead and Company. 1957. 408 pp. \$6.50. Here is the Illinois lawyer and politician as he viewed the world and as his neighbors viewed him. Here is the supposed lover of Ann Rutledge and the actual devoted husband of Mary Todd and indulgent father of Mary's children. Here is the ambitious rival of Stephen A. Douglas, besting Douglas and going to Washington as President-Elect, amid rumors of a plot on his life. Here, with his grief-stricken First Lady, is the President in his daily routine and in his continual crises, finding surcease in humor as he deals with troublesome generals, hostile congressmen and politicians of his own party seeking his defeat. Here is the Lincoln of the Emancipation Proclamation and the Gettysburg Address, the real person behind the symbols of Freedom and Union. And here is the man in his relationship to God, at least as he saw it.

RANDALL, R. P. *The Courtship of Mr. Lincoln*. Boston 6: Little, Brown and Company. 1957. 235 pp. \$3.75. In Springfield, Illinois, in November of 1842, a tall young lawyer with a gentle, homely face and a winning humanity of manner married a gay, impulsive, and pretty girl who belonged to one of the town's first families. His name was Abraham Lincoln; hers was Mary Todd. Their courtship had been a stormy one, with more than its share of opposition, interruption, and anxiety. But love had triumphed, and the young couple had found a devotion to one another that would last for life.

It is a strangely unfamiliar Lincoln whom the reader meets here, this unskilled young suitor so prone to doubts, self-questioning, jealousy, and poetry. The successful marriage of Lincoln's close friend, Joshua Speed, must have proved encouraging to this skittish bachelor, just as the quiet, happy romance of Mary's best friend, Mercy Levering, and James Conkling must have been of comfort to her in the stresses of wooing. The stories of these two pairs of lovers delightfully set off that of Abraham and Mary.

Marriage was much in the Springfield air. Men far outnumbered women in the bustling little capital, and the bachelors clustered about the marriageable girls. Blue-eyed Mary, with her quick wit and coquettish manner, was one of the most popular. As junior law partner of a cousin of Mary's and as the political ally of Mary's brother-in-law, in whose home she lived, "Mr. Lincoln" soon met "Molly" and was attracted.

REED, DENA. *Follow Your Star*. New York 36: Teen Age Book Club, 33 West 42nd St. 1957. 160 pp. 25c. TV stars tell how they got started and what guides their lives. Includes Perry Como, Lawrence Welk, Dina Shore, Debbie Reynolds, Roy Rogers, Fred Waring, Jimmy Durante, Marian Anderson, Julius La Rosa, and others.

RUBER, JOHANNES. *Bach and the Heavenly Choir*. Cleveland 2: World Publishing Company. 1956. 150 pp. \$3. It has been suggested that this novel ideally be read in an evening at home with the music of the Brandenburg Concertos filling the room. The strains of heavenly music will, assuredly, never be far away as you enter into this story of the contemplative, intensely musical

Pope whose dearest wish is to raise Johann Sebastian Bach to the ranks of the saints.

Written from a sense of deep enjoyment and a reverent love of music, this book is an example of higher whimsy which fairly demands suspension of disbelief as the scenes of Rome—approximately today—and the Italian countryside live before your eyes. The characters are firmly and beautifully drawn—gentle Pope Gregory, a gifted violinist, dedicated to the idea that music is a high form of religious worship, indeed a miracle in itself; those who surround him at the Vatican; the Lutheran Bishop and his lovely daughter drawn to Rome in the name of Bach. The swift and moving narrative sweeps to its climax in the tense debate on the canonization, at which the Pope himself presides and makes his own contribution in the form of an inspired rendition of a Bach partita.

RYDBERG, ERNIE. *Conquer the Winds*. New York 3: Longmans, Green and Company. 1957. 159 pp. \$2.75. An interest in soaring and gliding points the way out for a boy who is resentful of unfair treatment. Rocky has a chip on his shoulder. When a girl smashes his new car and runs out, he makes no explanation and takes the blame. His driver's license is taken away. A loyal friend, wise enough to suspect the truth, interests Rocky in gliding. Now Rocky wants more than anything to have a learner's permit and be accepted in the Gliders' Club.

His friend's sister, Star, helps with her sensible companionship and the know-how on gliding she shares so generously. Unfortunately, Rocky's sense of grievance has prompted him to indulge with some others in a foolish prank. Rocky is a very normal and likeable seventeen-year-old with the right instincts. His fine qualities are balanced against the obstinacy that kept him silent, the petulance that lead to the prank. And, of course, when everything comes out, the scales are heavily in his favor.

SANDOZ, MARI. *The Horsecatcher*. Philadelphia 7: Westminster Press. 1957. 192 pp. \$2.75. Young Elk, a Cheyenne Indian youth, does not want to kill. Instead of becoming a warrior in the great tradition of both sides of his family, he wants to catch and tame the fine and beautiful horses from the wild herds of mustangs that run as swiftly as cloud shadows over the prairies.

His father warns him that tribal honors and the soft glances of the maidens go to warriors, not to horsecatchers. But Young Elk is not easily swayed. Determined to test his skill in horse-catching, he slips away from the camp, and alone walks deep into enemy territory in pursuit of a band of wild mustangs. Although successful, he nearly brings disaster to his people and is openly shamed and rebuked by tribal leaders.

Later, during a Kiowa attack on his tribe, Young Elk is forced to kill an enemy warrior, and, although his actions are acclaimed and rewarded, he is sick with guilt. Seeking guidance through fasting and dreams, his determination to be a horsecatcher grows. Young Elk's search for horses brings him face to face with many dangers—dangers which demand even greater bravery than a warrior must display. He learns, however, that in order to attain this freedom from tribal tradition, he must assume his basic responsibilities to family and village. He must earn the right to live as he wishes.

SATTLEY, H. R. *Shadow Across the Campus*. New York 16: Dodd, Mead and Company. 1957. 255 pp. \$2.75. Cecile and Kate leave the home town where they have lived as close friends to enter a big university. Sorority rushing seems the most important part of college to them that first week and they embark on the series of rushing parties with high hopes. When Marjorie

and Kate receive bids from the sorority of their choice and learn that Cecile has been refused, because she is of the Jewish and not the Christian faith, all their college plans seem shattered. Marjorie and Kate react in entirely different ways, as is characteristic of them. Kate turns in her pledge pin and will have nothing to do with sororities at all. Marjorie stays in to see if she can, in some way, help to make the sorority girls understand the injustice of their decision. The rest of the book is concerned with how Marjorie undertakes the task she has set herself—how she struggles against the easier way of being a carefree and irresponsibly popular girl and the seemingly impossible one of being the person who can bring a whole sorority face to face with the situation they have brought upon themselves. She finds help and encouragement from a college senior with whom she falls in love, from some of the girls within her own sorority, from a former graduate and from a message that reaches back into the university's history.

SCHEER, G. F.; and H. F. RANKIN. *Rebels and Redcoats*. Cleveland 2: The World Publishing Company. 1957. 573 pp. \$7.50. Here is the American Revolution, the epic struggle that brought forth a new nation, told in a great measure by those who fought and lived in it—coming to life again in the actual words of its fighting men, its clay-pipe politicians, its foreign mercenaries, its determined redcoats, and its civilian men and women.

From Lexington Green and Concord Bridge to the last great siege at Yorktown, the parade of both famous and little-known participants and eyewitnesses tells a connected narrative of the War of Independence. For a large part of this book was written nearly two centuries ago; the modern authors simply outline and narrate the "bridges" which cover the events of the years 1775-1782. The big story is taken directly from letters, diaries, reports, and recollections.

Not that the story is confined to the accounts of unknowns: Paul Revere tells of his ride here; Washington writes to his wife on accepting his command; several British officers of rank are quoted, and a number of Washington's reports are used. Here too are the words of John Adams, John Hancock, Nathanael Green, Benjamin Franklin, Thomas Paine. The war in both north and south is represented, and the reader will find here some southern accounts which have been overlooked entirely by historians.

SHIRLEY, GLENN. *Law West of Fort Smith*. New York 17: Henry Holt and Company. 1957. 345 pp. \$5. When the Oklahoma Territory was a sink of lawlessness, Judge Isaac C. Parker came to take over the United States District Court at Fort Smith, Arkansas. Holding original, exclusive jurisdiction over 74,000 square miles, 200 United States deputy marshals, and great numbers of murderers, bootleggers, bank robbers, and horse thieves, Judge Parker soon won the name of "The Hanging Judge"; and for 21 years—through the 1880's and 90's—he ruled his district and meted out justice with an iron hand.

In this book the author presents a searching portrait of Judge Parker—not as a man who inexorably and unsympathetically hanged 79 men, often in batches of three or more, but as a man who came to a country that verged on anarchy, and took strong and effective action to suppress lawlessness. He records the whole story of the court at Fort Smith; gives fascinating and unromanticized accounts of the lives of the criminals—the Daltons, the Buck Gang, Belle Starr, Cole Younger, and many others, and tells how the hardy lawmen worked, alone or in small groups, almost always against tremendous odds, to bring in the criminals for the bounty which constituted their only pay.

SMITH, C. F. *The Valiant Sailor*. New York 10: Criterion Books, Inc. 1957. 192 pp. \$3. The author tells of Tony Donnithorne and his search to find the secret that haunts his seafaring father. Why did his father move the entire family by night from their home on the waterfront to a lonely inn on the moors? Who was the man with the dancing bear who came up the long road from the sea the night his father mysteriously disappeared? To find the answers Tony faced the perils of piracy and mutiny and the haunting danger of their life-long enemies, the treasure-mad Captain Bonaventure and his ominous henchmen, Larry the Whisper and Billy Winks. The dramatic settings of the tale—on the quays of Newcastle, on a lonely moor, in a French prison and rounding Cape Horn—will stir the imagination of many a young reader.

SMITH, R. J. *Engineering as a Career*. New York 36: McGraw-Hill Book Company, Inc. 1956. 377 pp. \$4.75. Written to acquaint beginning students with engineering as a career, this combination text and problem book was primarily designed for use in freshman engineering orientation courses. Besides indicating the qualifications, duties, and responsibilities of engineers, it defines the engineering profession in terms of functions as well as branches. In addition, the book provides motivation for the study of pre-engineering courses; provides training in the philosophy and technique of problem solution; and previews the basic engineering sciences and demonstrates their application.

Unique among such texts is the emphasis on the functional classification of engineering into the categories of research, development, design, production, construction, operation and maintenance, application and sales, industrial and management. The branches or fields of engineering—civil, electrical, mechanical, etc.—indicate what an engineer works with; the functions are related to what he does. The functional approach is, therefore, more meaningful to the student from the standpoint of career planning.

An elementary presentation of the engineering approach to problem solution will enable the student to view with a proper perspective the "exercises" usually treated in college courses, and, more important, will make him feel that he is on the way to becoming an engineer. Sufficient technical material enables a prospective engineering student to test his aptitude for and interest in engineering training. There are exercises (half with answers), problems, report topics, and special assignments at the end of each chapter.

SOBOL, D. J. *The Double Quest*. New York 21: Franklin Watts. 1957. 250 pp. \$2.95. The days of chivalry, in all their rich splendor, their daring, and their danger, come sharply to life in this swift-paced story of two quests: that of Martin, a young squire, and that of Brynoble, mysterious knight of the purple plume. But the double quest merges with a venture of larger scope. Henry II, king of England from 1154 to 1189, spent scarcely thirteen years in his island kingdom. During most of his reign he camped with an army on the continent, putting down one revolt after another, for he was also ruler of half of France.

Lest England rise against him during his long absences, he forbade it a standing army, and so made the island a tempting prize to his enemies. At one period the Flemish built a fleet of six hundred ships for one purpose: to carry an invasion force against the southern coast of England. Eight hundred years have shrouded that daring venture in mystery. History is tantalizingly silent concerning its outcome. Part of this story is an attempt to solve through fiction the fascinating riddle of what happened to the Flemish fleet. This is an enthralling tale of mystery, adventure, and intrigue, told against the vivid background of medieval England.

SOCKMAN, R. W. *A Lift for Living*. Nashville 2: Abingdon Press. 1956. 144 pp. \$2. "The brief messages in this little book have been garnered from long sowing," the author writes in the foreword. "It is my hope that they may serve as seed thoughts to start enriching ideas growing in the minds of their readers. . . . They are designed to keep us on the 'growing edge' of life." These 52 inspirational readings deal with familiar situations and problems with which we come in contact daily. They present answers grounded in reality and Christian experience. They are simple and to the point. Coming from the mind and heart of one of America's best-loved preachers, each message contains insights into the homely, often ordinary experience—insights that raise life to a higher level, making it a richer, more satisfying, more productive adventure.

SPROUL, E. E. *The Science Book of the Human Body*. New York 21: Franklin Watts, Inc., 699 Madison Ave. 1955. 248 pp. \$4.95. Do you know what the various organs of your body are, what they do, how they perform their functions, and how they interrelate? A physician answers these questions and many others in this easily read book for laymen. A simple up-to-date introduction to a complex subject, made even clearer by its many pictures and diagrams, some in two colors.

STALLINGS, J. H. *Soil Use and Improvement*. New York 11: Prentice-Hall. 1957. 511 pp. \$4.90. This book explains how wind and water erode the soil, how these damages can be prevented, how our soil can be cropped to full capacity, and how crop yields can be increased—all at the same time. The book is divided into three parts. Part I, historical in nature, presents a brief survey of the effects of soil erosion on ancient civilizations, as well as on early settlements in this country. Part II is concerned with the fundamental factors that should be considered when dealing with the problems of soil erosion. It explains the erosion of soil by wind and water, the formation and maintenance of soil crumbs (soil tilth), the importance of plant cover in building and holding the soil, and the intricate relationship existing between soil, plants, and animals. Part III studies the remedial measures for controlling erosion and for improving our soil while, at the same time, cropping it to the fullest extent. It discusses control measures for erosion both by wind and water, maintenance of good soil tilth, and the most effective management of our grazing and woodland. Part III also presents all the elements needed in planning a sound soil and water conservation program and explains how to use them in developing such a plan.

STANFORD, DON. *The Red Car*. New York 36: Teen Age Book Club. 33 West 42nd St. 1957. 192 pp. 25c. Has made it roll again—and win.

STEINMETZ, R. C. *The Amish Year*. New Brunswick: Rutgers University Press. 1956. 223 pp. \$5. This book describes and illustrates typical incidents in an ordinary year of work and play among the Amishmen of Lancaster County, Pennsylvania. Here are the Amish engaged in the everyday activities of country life—working hard on their rich farms, shrewdly doing business in town, relaxing at a wedding or a barn-raising, soberly attending a funeral. We see the ways in which they are enough like us to be the family next door. We see, too, the ways in which they are different—the old-fashioned cut of their clothes, the simplicity of their homes, their refusal to use electricity or motor-powered vehicles, their evasion of publicity, their aversion to modern habits.

Here and there, as the authors make plain, modernity is creeping in upon this distinctive way of life, but the Amish still preserve a stable and healthy

society. Although the Amish do not care to be either photographed or written about, the author and photographer, as neighbors of long standing, have succeeded in portraying them in a series of casual, vivid photographs and verbal sketches.

STEPHEN, DAVID. *Six-Pointer Buck*. Philadelphia 5: J. B. Lippincott Company. 1956. 256 pp. \$3.50. This story of a roebuck is set in the Scottish hill country and founded on an extraordinary insight into the world of animals. Bounce, the roebuck, is born into a hard world full of hazard. His mother is shot by a blaze-away sportsman before he is weaned; he is haunted by everything that has teeth and claws and an appetite for blood. But he survives and grows, and gains, in the woods and heathery moors of his home-country, the strength and cunning that are to make him, as a full six-pointer, the master of them all.

STEVENS, H. R. *The Early Jackson Party in Ohio*. Durham, North Carolina: Duke University Press, Box 6697, College Station. 1957. 201 pp. \$4.50. What was the origin of Jacksonian Democracy? This unique American contribution to self-government, still a part of our political system, has spurred generations of scholars to investigation. It began in Nashville, Tennessee, simply as an effort to elect Old Hickory to the Presidency, but like other great national movements it grew from grass roots in every part of the country.

This book is an exploration of the origins of the movement in Ohio, one of the two western states where it had its greatest strength. The author examines and presents in detail the methods whereby a great national political party came into being. Current hypotheses are studies—sectional interests, "public issues," the frontier, social and economic class alignments, military hero worship, and others—and are found inadequate or erroneous. In many of those respects the Jackson party was almost exactly parallel to its rivals, the parties of Henry Clay and John Quincy Adams. In some details it was different, and these are chosen for special presentation. Notable among them are the significance of a "political generation," the relationship of party builders holding public office to those not in the public eye, the frontier practice of party organization by non-professional politicians, the circumstances that led local political leaders to take the initiative in forming the Jackson party instead of following the lead of nationally prominent men, and many others. The great achievement stressed is the creation of national political parties in the United States in a situation where none existed.

STRANG, RUTH; RALPH ROBERTS; REGINA HEAVEY; WALTER BARBE; and HARRIET STEWART. *Teen-Age Tales*. Book One by Strang and Roberts, Book Two by Strang, Book Three by Strang and Heavey, Book Four by Roberts and Barbe, and Book Five by Heavey and Stewart. Boston 18: D. C. Heath and Company. 1957. \$2.40 each. These five books, each of approximately 256 pages, contain stories about teenagers and their interests—stories of adventure, suspense, sports, science, animals, school life, boy meets girl—stories on a high-school level of interest, but a fifth-sixth grade level of reading difficulty. These new *Teenage Tales* are colorful, swiftpaced, interesting—up to the high mark set by Books 1, 2, and 3. Book 4 is on the level of Books 1 and 2; Book 5, on the level of Book 3. However, all five *Teenage Tales* are practically interchangeable.

Vocabulary and sentence length have been controlled to make reading as easy as possible for the slower pupil. Character relationships are not permitted to become numerous and complex. There is no danger of the slow reader losing

his way, and, consequently, his interest, by having to follow rapid and frequent changes of scenes and characters. The areas of interest are those of any high-school pupil, regardless of ability. The pupil, though of lower ability than his classmates, is met on the level of his interests. The books are eye-appealing. The page is open and inviting; the two-color drawings, realistic. To make the books look as little like textbooks as possible, the questions have been placed at the back. A *Teacher's Manual* for each book contains instructions and suggestions for presenting the stories to a class. There is also material for motivating vocabulary building and reading skills development. The stories run from short to long. The slow reader starts out with a very short, interesting story. He experiences the satisfaction of easily completing a reading assignment, thus giving him courage and confidence to go on to the next. The stories lend themselves effectively to the pupil's personal development and guidance.

STUELKE, T. R. *Little Soldier*. Dallas, Texas: Taylor Publishing Company. 1956. 128 pp. (7 $\frac{1}{2}$ " x 10 $\frac{1}{2}$ ") \$3.95. This book is based on an authentic story of army life in the South Pacific, but it has an approach quite different from other books. The author's little son was growing up without his dad's guidance. So he wrote his son long letters telling of his experiences in Hawaii, New Guinea, and the Philippines. He wrote about the animals, "fuzzy-wuzzies," Japs, etc. He gambled on his son's interest in soldiers and other unusual experiences with the hope that his son would not detect his teaching.

Upon the author's return to civilian life, he rewrote 60 of these letters and illustrated them with striking cartoons. The author is now principal of the Abraham Lincoln High School in Council Bluffs, Iowa. This experience as teacher and administrator places him in a good position to write this guidance type of book.

SUTCLIFF, ROSEMARY. *The Shield Ring*. New York 3: Oxford University Press. 1956. 223 pp. \$3. The Conqueror's Domesday Book stopped short at the foot of the Cumberland fells; for in the heights of what is now the Lake District stood the entrenched Vikings, indomitable and unconquerable, and not all the resources of Norman England could break into the last Norse stronghold. Their defense, their shield ring, was not only the high barrier of the fells; it was the fanatical Norse spirit of battle, the burning determination to hold out against overwhelming odds.

THORNTON, WILLIS. *Fable, Fact, and History*. New York 22: Greenberg. 201 East 57th St. 1957. 256 pp. \$4.50. Are you under the impression that the Boston Massacre was an unprovoked mass murder of unarmed and inoffensive civilians? The real story is quite different. Did Pocahontas dramatically save John Smith's life? Perhaps, but the whole known story is more interesting than you think. Do you incline to believe the stories about the "strange deaths" of Presidents Harding and Roosevelt? Or those about Trotsky, Hitler, even Kitchener? Did John Wilkes Booth escape his pursuers? Have you suspected that governments often shape history? Did Richard III really murder the little princess in the Tower, as Shakespeare said? Many serious people are now defending this man, whom we were taught to regard as an arch-villain. How much of a "historical novel" is history?

It is with such matters that the author is concerned in this book. He has taken many well-known historical events and shown how "historical detective work" has uncovered the truth about them. And these up-to-date verdicts of careful students are often very, very different from the stories we learned as school children. His book may prove disillusioning about certain persons and events in history, but never about the truly great, or about history itself.

Like many others, the author began to sense the true greatness of George Washington only after the "plaster saint" image created by the cherry tree legend had been smashed.

In the expectation that readers will want to go deeper into some of the subjects discussed, the author has appended to each chapter an informal chat suggesting further trails that can be followed with pleasure.

TOMPKINS, W. A. *SOS at Midnight*. Philadelphia 2: Macrae Smith Company. 1957. 223 pp. \$2.75. Ham radio enthusiast Tommy Rockford—K6ATX—had no idea how important that message was to be as it leapt to life on the teletype in Sheriff Jackson's office. A short time later Tommy, driving his ham-set equipped car, met his friend Doc Baldwin at the yacht basin. A strange but friendly little man on the wharf invited them aboard his boat to translate a few Morse code messages he had picked up on a tape recorder. A coincidence of events fired off a train of thought that rapidly convinced Tommy that he had stumbled upon a message from the Purple Shirt Mob.

None other than Grote Slankard, rated number-one criminal on the FBI list and head of the Purple Shirt Mob, had sent that code and it contained information as to where and when the next dope-smuggling would take place. With no time to stop by the sheriff's office, and afraid a radio warning would be intercepted, Tommy and Doc careen off on a wild ride to the assignment place and the most hair-raising adventure of their seventeen-year-old lives; one that would have proved tragic but for the quick-wittedness of the ham radio "fraternity." This is a wonderfully different kind of story of boys providing not only adventure but also an exciting insight into the growing hobby of amateur short-wave radio communications.

TRESSLER, J. C., and M. C. LIPMAN. *Business English in Action*, second edition. Boston 16: D. C. Heath and Company. 1957. 546 pp. \$3.80. A competent business worker is able to think and to speak clearly and concisely as well as to write or to type mailable letters. Beginning with conversing in business, listening with understanding, acting as a receptionist, and using the telephone, the text treats enunciation and pronunciation, voice improvement, interviewing, getting the right job, speaking to a group, oral salesmanship, and discussing business problems.

The chapters on business speech have been alternated with those on writing to distribute the correction of written work during the term or year. Since no two teachers will wish to present the work in exactly the same order, the book is divided into two sections, "Speaking and Writing on the Job" and "Handbook of Grammar and Usage." The Handbook provides drill on grammar, punctuation, and spelling, and is also a reference book on correct usage. This arrangement keeps the drill exercises and rules out of the way when not needed. Yet the orderly arrangement of the Handbook, a full index, a complete table of contents, and references to the Handbook in "Speaking and Writing on the Job" make the exercises and rules instantly available to the pupil who wants help and to the instructor when he wishes to teach spelling, grammar, or punctuation.

The book includes training in salesmanship, personality development, group speaking, and voice culture. All kinds of business letters and forms are treated and problems of English grammar and usage are dealt with in Part Two. Part One deals with the various kinds of business situations in which one speaks, writes, reads, and listens. Part Two consists of a handbook of grammar and usage.

Some other special features include its easy readability, its division into handbook and business situation sections; teaching text supplemented by vocationally slanted activities to develop skill through participation; and photographs of business situations and cartoons together with numerous charts and diagrams to help learning and recall.

TREVOR, ELLESTON. *Gale Force*. New York 11: Macmillan Company. 1956. 246 pp. \$3.50. This book reveals something of the immense vitality of Conrad. The *Atlantic Whipper*, 200 miles off Land's End, carrying a cargo of grain and ten passengers, flounders under tremendous seas lashed by winds of gale force. On the bridge, Captain Harkness awaits help and struggles to keep his ship afloat—the ship that his wife, back in her seductively warm and neat home, hates with every atom of her being. Wearily he thinks of the third officer, charming Pete Costain, who will probably not survive to marry the timid young passenger he loves; of the handsome cripple Sennett, whose neurotic dependence on his penitent wife may well be brutally ended. Then after hours of hopeless waiting, the Spanish ship *Angeles* labors into sight and passengers and crew are taken aboard. In a vigil of terrible loneliness, the captain waits for white water to engulf the last dark stump of his vessel before jumping to safety. In those dark hours what obsesses him is the conviction that his wife has won her ultimate victory over the ship.

TRUMBULL, ROBERT. *As I See India*. New York 16: William Sloane Associates. 1956. 256 pp. \$4. The author went to India in 1947, expecting to be there a short time. At the end of seven and a half years, he had seen India evolve from a nation of doubtful hopes, born in uncertainty and bloodshed, into the most stable country in Asia and a voice of strong moral power in world affairs. He had also met a number of India's 562 ex-Princes, come to terms with drunken elephants, eaten lotus flowers in the Vale of Kashmir, and nearly rescued the Dalai Lama from the Forbidden City of Tibet. He saw every side of India, from the top echelons of politics to her everyday and not-so-simple private citizens. The great figures come alive here: Pandit Nehru, Jinnah, Bhave, and of course Gandhi himself. But the flavor of the book is not in formal portraits of the great; rather, it is in the casual phrase, the informal observation, the perceptive comment.

TUCHMAN, B. W. *Bible and Sword*. New York 3: New York University Press. 1956. 284 pp. \$5. Latter-day history has been content hitherto to trace the origins of Great Britain's Palestine Mandate, based on and incorporating the Balfour Declaration, to the exigencies that had to be faced at the close of the First World War. The author, searching the interactions of Britain and the Holy Land over a span of centuries, shows Declaration and Mandate as the almost inevitable end product of causes that go much further back—causes that include a long sequence of gradually evolving motives, religious as well as political.

A steady British advance toward the heart of the Middle East had been an historical fact long before Lord Milner pointed out that it was required by "the imperious necessity of acquiring defensible frontiers," and even before Lord Peel, chairman of the most effective of seventeen Commissions of Inquiry, said of Palestine: "No other problem of our time is so deeply rooted in the past." The inveterate spiritual importance of the Holy Land to England goes back into misty ages of legend, continues into the centuries of pilgrimages and of the Crusades, and is implicit in the omnipervasive influence of the book that Thomas Huxley said had become his country's national epic—the English Bible.

It is a stirring piece of history as well as a long and involved one. The

author tells it in terms of its most vivid incidents and personalities. It begins with the discovery of prehistoric Albion by a people of Palestine, the black-bearded Phoenicians who traded in Cornwall's tin. For a thousand years the Pilgrim movement brings a constant stream of travelers to Jerusalem: great sinners like Earl Sweyn, rascally brother of King Harold, who made England too hot to hold him after he abducted a nun; mystics like Margery Kempe, whose piety annoyed even the Church; foreign correspondents like Sir John Mandeville, whose *Travels* was the best seller and greatest hoax of his time; or like William Wey, an early Baedeker who informed medieval travelers what to pack, how much to tip guides, where to buy relics, what each holy place was worth in the amount of absolutions to be gained. Then the generations of Crusaders fling themselves upon Palestine and make its soil the graveyard for half the families in England. King Richard storms the beach at Jaffa, but in the end must turn back, hiding his eyes from view of the Jerusalem he could not take.

The Reformation and the translation of the Bible into English open a new epoch. Tyndale, working in secrecy abroad in a candle-lit garret, makes the translation that will set the pattern for the King James version—and goes to the stake for it.

UHLENDORF, B. A., translator. *Revolution in America*, Confidential Letters and Journals 1776-1784 of Adjutant General Major Baurmeister of the Hessian Forces. New Brunswick: Rutgers University Press. 1957. 656 pp. \$9. Here is one of the most unbiased, comprehensive, and informed of the contemporary accounts of the Revolution, appearing in book form. The 94 letters and journals dated from September 2, 1776, to April 23, 1784, virtually provide a continuous narrative of America's War for Independence.

Baurmeister, an astute observer and a professional soldier, reported to his superior, the Minister of State of Hesse-Cassel, on the military events and the social and economic aspects of the War. He was attached to Hessian headquarters and, for some time, to the British general staff, and so was in position to report at firsthand many of the momentous events and decisions of the conflict. Baurmeister not only gives a full account of the much-maligned Hessians, but also comments critically on such subjects as British laxity and negligence, the interrelation of British commerce and warfare, the social and economic conditions in the new country, the bickerings of Congress, and General Washington's relation to Congress.

The calm, analytical approach that Baurmeister took, free as he was of patriotic ties to either side, gives this book the quality of freshness. His narrative makes a book not for specialists only but also for all readers interested in the American Revolution. Containing information not elsewhere available, it throws new light upon the whole period of the War of Independence.

VERY, ALICE. *Round-the-Year Plays for Children*. Boston 16: Plays, Inc. 1957. 285 pp. \$3.50. This collection of 35 royalty-free, one-act plays for young children offers charming, short dramas for celebrating holidays and festive occasions throughout the year. Lively plots and attractive settings make these plays especially enjoyable for little players.

The holidays represented include Columbus Day, Halloween, Thanksgiving, Christmas, New Year's Day, Lincoln's birthday, Washington's birthday, Valentine's Day, Arbor Day, and Mother's Day. There are also special plays for the four seasons, adaptations of classic folk tales and legends, and dramatizations of childhood incidents in the lives of great heroes. In addition, there are gay,

simple plays about nature—trees, flowers, and animals. Production notes indicate easy ways of achieving dramatic effects simply and inexpensively.

VON HAGEN, V. W. *Realm of the Incas*. New York 22: New American Library of World Literature. 1957. 231 pp. 50c. An archaeological history of the ancient empire in hidden strongholds of the South American Andes.

WALKER, D. E. *Adventure in Diamonds*. New York 3: W. W. Norton. 1955. 223 pp. \$3.50. This is the true story of the adventures of three men over one long weekend in 1940. As late as Thursday, the three were planning nothing more exciting than a relaxing time in the English countryside. By Monday they had executed one of the exciting undercover operations of the war. By Tuesday they were back at their jobs.

When the Germans ended the phony war and broke across the borders of the Low Countries, the British suddenly realized that the vast stores of industrial diamonds in Amsterdam would be of incalculable value to the Nazi war machine and a deadly loss to the Allies. The three men—two Hollanders and one British intelligence officer—were snatched from their peaceful weekend planning, rushed aboard a destroyer and across the channel, and put ashore by small boat in the harbor of Ymuiden.

The harbor was ablaze, street fighting was in progress, the waterfront was jammed with refugees trying to beg or buy passage to England by fishing boat. Into this chaos the three men plunged, located a car and (truth being here the supporter of fiction) a lovely young girl to drive it. Then they set off for Amsterdam and the great haul of diamonds. What happened from that point on makes one of the most exciting true tales of daring, suspense, and escape to come from the little-known early days of the war.

WELCHONS, A. M.; W. R. KRICKENBERGER; and H. R. PEARSON. *Algebra*, Book Two. Boston 17: Ginn and Company. 1957. 592 pp. \$3.68. In this revision, changes have been made in the development of subject matter, sequence of topics, and gradation of exercises and problems wherever they seemed to make the book easier for the teacher and student to use. The treatment of linear functions has been extended and a brief chapter on statistics has been added. This book is intended for students who have completed the study of first-year algebra. It can be used either before or after the study of plane geometry.

In preparing the text, the authors have aimed to arouse the student's interest in mathematics and to maintain that interest throughout the course. They have tried to present the subject matter so that the student must think for himself. Some of the special features of the book are:

The explanations and discussions are so written that they may be readily understood by the students. Numerous illustrations and examples assist in the understanding of new concepts, principles, and procedures. Pitfalls are anticipated and care has been used to avoid them. New terms are carefully defined and new operations thoroughly explained. The book is written to the student. Its language is simple and easily understood. Sentences and paragraphs are short.

The graph is used as a visual aid in the study of formulas and other equations. It is used as a means rather than as an objective. Other diagrams likewise are used where they will serve a real purpose. Color has been used as a teaching aid and to add to the attractiveness of the book. Various means have been used to create and maintain interest. New concepts are presented as extensions of familiar ones. The need for mathematics is shown by articles, discussions, problems, and pictures. More than the usual treatment of functional

relations is presented. Throughout the book students are led to discover the dependence of one quantity upon another.

The text contains applications of algebra to geometry, commerce, science, and industry. The applied problems do not require extensive knowledge in any of these fields. Special attention is given to the preparation of the pupils for physics and chemistry. The book contains reviews and tests. It includes chapter and cumulative reviews, chapter checklists, and chapter and cumulative tests. The tests can be used as reviews, self-tests, or as sample tests. It also provides for individual differences by including topics and exercises labeled A, B, and C. The A exercises and topics are intended for all students. The B exercises and topics are for those students who wish to do more than the minimum requirement. Those marked by a C are for pupils especially gifted in mathematics.

The text was designed for a full year's course, but it is so arranged that it can be used effectively for a terminal third-semester course. Most schools will be able to cover Chapters 1-9 in one semester and Chapters 10-17 in a second semester. Because of differences in classes, the authors have not attempted to specify the time needed for any one topic.

WILSON, J. D., and ALICE WALKER, editors. *Othello* (New Shakespeare). New York 22: Cambridge University Press. 1957. 316 pp. \$3. This volume of the New Shakespeare editions follow that of the others in this series—an introduction, a history of the stages, the play itself, extensive notes, and glossary.

WITFOGEL, K. A. *Oriental Despotism*. New Haven 7: Yale University Press. 1957. 576 pp. \$7.50. This long-awaited study has been eagerly hailed in advance of publication as the first thorough analysis of Oriental despotism as the only major system of total power prior to modern totalitarianism; an entirely new evaluation of such basic institutions as private property, class, and bureaucracy (until now treated by social science only in the light of the experience of multi-centered Western societies); a new explanation for totalitarian communism and for core elements of the Marxist-Leninist doctrine.

The author believes that the peculiar forms of Oriental despotism—not limited to the Orient—had their origin in societies where irrigation was a matter of life and death to the people and their crops, and control of the water courses was in the hands of the ruler and his bureaucracy. He has investigated an enormous quantity of firsthand material to explain the character of these societies, and his book, which has been half a lifetime in preparation, has already been greeted by competent scholars as a work of first importance.

WRIGHT, CONSTANCE. *A Chance for Glory*. New York 17: Henry Holt and Company. 1957. 257 pp. \$3.95. The little garrison town of Olmutz, a four-day carriage journey from Vienna, was in 1794 the scene of possibly the most presumptuous rescue in history. For it was there that two audacious travelers plotted—and very nearly achieved—the permanent release of Lafayette from "a dungeon vile and drear." Two years earlier, the general had been captured by an anti-French faction in Belgium and shuttled across Europe from one fortress to the next. France at that time was in the turmoil of revolution. Lafayette, a republican, could count on neither the Jacobins nor the French monarchy for help. Taken at last to Olmutz, he was cast into a cell where—except for one lapse of less than a week—he languished for several years.

It was a bitter period for the man who had made freedom his creed. Though his many influential friends (Hamilton, Pinckney, Madame de Stael were among them) worked hard to free the Marquis, negotiations were parried from the start. It remained for two young men to make a brazen bid for Lafayette's release. The older of the two, Justin Erich Bollmann, was a handsome young doctor from Germany. Bollmann was only 25 years old—for three years he had been traveling about the Continent in search of Lafayette. His political adventures in the capitals of Europe, as well as his private adventures with the ladies along the way, led him to conceive the plan that was to liberate Lafayette.

WRIGHT, L. B. *The Cultural Life of the American Colonies*. New York 16: Harper and Brothers. 1957. 309 pp. \$5. In this exciting account of ideas, manners, and institutions in colonial times, the author examines both ends of the social spectrum—the aristocrats and the ordinary folk—and discusses their cultural interests and achievements in terms of their opportunity, social status, national origins, and geography. While the role of the great families is appropriately emphasized, he removes a good deal of the glamour from the colonial South, treats the New England Puritans with refreshing objectivity, and provides illuminating insights into the new aristocracy of trade. The reader is given a new look at the religious and educational institutions, a fresh appraisal of its men of science, painters, architects, and literary figures, and a re-evaluation of the contribution made by colonists of other-than-English origin. The author incorporates in his findings the results of the latest scholarship. Concerned here with how the colonists lived, earned a living, and enriched their lives, this is a moving, human, and immensely sympathetic book—a classic in the field of colonial thought and culture.

WYCKOFF, N. E. *The Braintree Mission*. New York 11: Macmillan Company. 1957. 192 pp. \$3.50. There are two charming heroines in this book—Abigail Adams and Lady Hester Chatham. There is an English nobleman who cannot be classified as a villain, but who is certainly a secret emissary—Edward Humbird, 6th Earl of Hemyng. There is a stupid Prime Minister—Lord North, who serves an equally foolish master, George III of England. There are two heroes, men of widely different backgrounds, but both of extraordinary character—John Adams of Massachusetts, and William Pitt, Lord Chatham. The year is 1770, and the scene moves from London to Boston and back again to London.

Out of these characters, all of whom except Lord Hemyng and his secretary Giuseppe Tompkins are figures of history, the author has spun an enchanting tale, a recreation of history as it might have happened. For if Lord North had had the gift of high audacity, if Abigail Adams had not been the perfect wife she was, if John Adams had not possessed a fierce integrity—history might have taken a different course.

YOUNG, L. E., and W. M. PETTY. *Chemistry for Progress*. New York 11: Prentice-Hall. 1957. 591 pp. \$4.68. This is a completely up-to-date basic chemistry textbook, including chapters on nuclear reactions and carbon compounds, that is usually well illustrated. It is written from a practical high-school teaching viewpoint, by high-school teachers. The large and varied number of questions found at the end of each section within the chapter, and also at the end of the chapter, provides the student and teacher with an exceptional opportunity for testing and drill in the basic principles learned. They are arranged in two groups according to difficulty. The elements are studied in groups as they appear in the periodic table, making their interpre-

tation easier for the students (periodic table includes actinide elements through 101). A summary at the end of each chapter, the defining of new terms as they appear, and a complete glossary are additional important aids to learning and teaching.

This book is a basic text for high-school chemistry courses and can be used for the pre-college or pre-nursing student. There are more than 350 drawings and diagrams, showing the most up-to-date equipment and methods with exceptional clarity. Some are: units of measurements, diagrammatic structure of atoms, combination of atoms, structural formulas of hydrocarbons, nitrogen and hydrogen combinations, brownian movement, colloidal mill, industrial applications, blast furnace, Bessemer converter, steel alloy chart, and the cyclotron.

Pamphlets for Pupil-Teacher Use

Administration of the Insurance Program. Sacramento: California State Department of Public Instruction, the Office of the Supt. 1957. 83 pp. Represents an effort to make available to local governing boards and administrators of school districts a concise reference to assist them in evolving, administering, and evaluating the insurance program of their school district.

Administration of Public Laws 874 and 815. Washington 25, D. C.: Supt. of Documents. 1957. 140 pp. 65c. Discusses these laws for financing educational services for children on tax-exempted Federal property and contains tables of statistics on those areas so affected.

Admissions Information. Princeton, N. J.: College Examination Board, c/o Educational Testing Service, Box 592. 1957. 83 pp. \$1. This is a collection of 13 articles concerning the collection, interpretation, and use of data on admissions applicants by colleges. Written by administrators and specialists in the field of higher education, the book shows how various kinds of candidate information may be obtained and how it may be effectively processed by admissions officers and registrars to satisfy and serve the needs of students, faculty members, and administrative officers. It includes detailed descriptions of the manner in which applicant data from all sources is assembled, organized, and evaluated at Harvard College; the recording and reporting of summary student statistics at New York University; and the procedures developed at Yale University to reproduce and make available the kinds of information requested by different officers and departments. The nature and value of biographical, interview, and questionnaire data are discussed more generally, as is the quantitative use of such predictive measures as test scores, school grades, rank in class, and personal recommendations. Other sections explain the advantages of basic machine and electronic data processing methods, the employment of admissions information in course placement systems, and the communication responsibilities and problems of the scholarship officer.

Annual Report. New York 36: Joint Council on Economic Education, 2 West 46th Street. 1957. 28 pp. Free. Discusses various phases of its program.

Annual Report to the Board of Trustees. Princeton, N.J.: Educational Testing Service, 20 Nassau St. 1957. 150 pp. Reviews activities during the school year 1955-56, discussing test development and analysis, research, special profession services, programs, finance research projects, etc.

BAUER, H. A. *Cartography.* Cambridge 38, Mass.: Bellman Publishing Company, Box 172. 1957. 32 pp. \$1. This, as well as the other 50 some

monographs in this series, deals with the nature of the vocation and how to get into it. Given are personal qualifications and scholastic training needed, employment opportunities, remuneration, chances for advancement, and advantages and disadvantages. Other recently published ones include *Recreational Leadership*, *The Restaurant Business*, *The Linotype Operator*, *The Pharmaceutical Industry*, and *Philanthropic Fund-Raising as a Profession*. Each of these monographs is written by an expert in his particular field and edited by a guidance editor.

Books are Bridges. New York 22: Anti-Defamation League of B'Nai B'Rith, 515 Madison Ave. 1957. 64 pp. 25c. A recommended list of books for children. Books classified under 3 levels—kindergarten, primary, and junior high school.

The Chemical Industry Facts Book, third edition. Washington 6, D. C.: Manufacturing Chemists' Association, 1625 Eye St., N.W. 1957. 160 pp. \$1.25. This basic reference work on the chemical industry contains 15 chapters ranging from "The Industry's Role in the Economy" to such specifics as "Chemicals and Nuclear Energy." Profusely illustrated with charts, graphs, and tables, the third edition of this *Facts Book* updates information on virtually every facet of the industry. Past editions have proved to be valuable aids to editors, educators, analysts, and others requiring detailed, accurate information about the chemical industry. About 100,000 copies will be distributed either by chemical companies or directly by the MCA. It is anticipated that one of the principal uses of this *Facts Book* will be in schools and colleges as a supplementary text and reference work. A 20-page *Teacher's Guide* prepared by Dr. John S. Richardson, president, National Science Teachers Association, is available free to educators for use with the book.

Children Turn to Educational Television. Ann Arbor, Mich.: Educational Television and Radio Center, Washtenaw Ave. 1957. 16 pp. Free. Shows youth's varied interests.

Coronet Films. Chicago 1: Coronet Films, 65 E. South Water St. 1957. 100 pp. A catalog of 695 carefully planned color 16mm sound motion pictures for educational use and available from the Coronet Film Company on purchase or rental basis.

Directory of Accredited Institutions and Operating Criteria. Washington 5, D. C.: Accrediting Commission for Business Schools, 417 Homer Bldg., 601 Thirteenth St., N.W. 1956. 24 pp. Contains list of accredited business schools and the criteria by which a school is evaluated in order to be accredited. This organization has been approved by the U. S. Commissioner of Education for placing on the list of "nationally recognized accrediting agencies and associations" under the provisions of Public Law 550.

EISENHOWER, DWIGHT D. *The Situation in the Middle East*. Washington 25, D. C.: Department of State. 1957. 16 pp. Free. A radio and TV address to the American people on February 20, 1957, by the President.

Emergency Care Chart. Minneapolis 13: Minneapolis Public Schools, 807 N.E. Broadway. 1956. unpaged. \$1. This is a product of the health, physical education, and recreation staff of the Minneapolis Public Schools. The chart is designed to be hung in classrooms, shops, laboratories, offices, and the like, as a ready and quick reference for first-aid treatment. Further use can be made of the *Chart* in classroom instruction.

Evaluation of Sets of Books for School Libraries. Raleigh: North Carolina State Supt. of Public Instruction. 1956. 16 pp. An evaluation of sets for use

by North Carolina school people when considering the purchasing of sets of books.

The Future Is Theirs. Honolulu: Joint Commission on Guidance and Employment of Youth, Department of Public Instruction. 1956. 32 pp. A study of Hawaii's 1952 high-school graduates four years later. Also available from the same source are: *Occupational Training Opportunities in Hawaii* (1956. 41 pp. Gives information of training institutions to which high-school graduates may go for this type of education. The list does not recommend or endorse any.); and *Hawaii's High-School Graduates* (1956. 30 pp. A survey of the 1956 graduating class and a comparison of it with the classes of 1952, 53, 54, and 55.).

Governor's Committee on Higher Education. Minnesota's Stake in the Future—Higher Education, 1956-1970. St. Paul 1: Minnesota State Department of Education, 301 State Office Building. 1957. 108 pp. A study and report on present and future needs in higher education in the state of Minnesota.

Growth in the . . . Greenwich Public Schools, 1946-56. Greenwich, Connecticut: Superintendent of Greenwich Public Schools. A report through pictures, charts, and graphs, together with the text, giving an excellent survey of the services performed by the Greenwich Public School System.

HAFSTAD, L. R. Science, Technology, and Society. Detroit: General Motors. 1957. 20 pp. Free. A talk delivered at the annual meeting of the American Association for the Advancement of Science by Dr. Lawrence R. Hafstad, vice president of General Motors in charge of the Research Staff, in which he discusses the need for a closer liaison between the scientist and the humanist, and a better understanding on the part of each of what the role of the other is in our society.

HANSEN, C. F. Miracle of Social Adjustment: Desegregation in the Washington, D. C., Schools. New York 22: Anti-Defamation League of B'nai B'rith, 515 Madison Ave. 1957. 70 pp. 35c. This is the story of the nation's capital's program to integrate its school system.

HARPER, F. A. Why Wages Rise. Irvington-on-Hudson, New York: The Foundation for Economic Education, Inc. 1957. 124 pp. \$1.50. A brief, non-technical explanation.

HIRSH, SELMA. Fear and Prejudice. New York: Public Affairs Committee, 22 E. 38th St. 1957. 25c. Childhood fears and anxieties lie at the root of much if not most of adult prejudice, according to the author. In attempting to cope with prejudice, we should recognize, the author declares, that "the prejudiced are a fearful people, and they are not likely to express their prejudices unless a popular belief confirms them—or unless they are sure that it is 'safe' to do so. Therefore, they will lash out at those who are weaker than they are—or at those whom a great many other people appear to dislike."

Improving Science and Mathematics Education. Washington 25, D. C.: National Committee for the Development of Scientists and Engineers. 1957. 16 pp. Single copies free. Offers specific ways in which individuals and organizations can co-operate in laying the foundation in the elementary and secondary schools for meeting the nation's needs for competent scientists and engineers.

JULIAN, JOSEPH. The Devil and the Dream. New York 22: Anti-Defamation League of B'Nai B'Rith, 515 Madison Ave. 1957. 16 pp. 15c. A human relations play for teenagers—4 characters; 20 minutes.

Junior High School Handbook—Mechanical Drawing, Sketching, Blueprint Reading. Minneapolis 13: Minneapolis Public Schools, Administration Bldg., 807 N.E. Broadway. 1957. 75 pp. \$2. As the title implies, it is designed for use in junior high-school drawing classes. The book is in four sections: (1) Introduction; (2) Mechanical Sketching; (3) Mechanical Drawing and (4) Blueprint Reading. Each section is printed on a different colored paper. The book is wire, spiral bound; has an unusually heavy cover and page stock so that it can be set up in "tripod shape" before the student as he works. This publication was prepared by a committee of junior high-school drawing instructors.

KAPAS, ERVIN; E. V. MECH; and W. H. FOX. *Schoolroom Motivation.* Bloomington: Indiana University Bookstore. 1957. 56 pp. \$1. A report of two experiments to discover how elementary-school pupils react to positive verbal stimuli from their regular classroom teachers.

MATTINGLY, R. C. *Scholarships and Fellowships.* Bulletin 1957, No. 7. Washington 25, D. C.: Supt. of Documents. 1957. 32 pp. 15c. Annotated articles and other material describing research studies in the field of financial aid to students and in related areas. These areas cover plans for high-school seniors, academic performance of scholarship holders, problems of administration of scholarship programs, and proposals for more student financial aid.

National Tape Recording Catalog. Washington 6, D. C.: Dept. of Audio-Visual Instruction, 1201 Sixteenth St., N.W. 1957. 76 pp. \$1. An annotated listing of tape recordings including price and length of program in minutes. Part 1 is the 1954 Catalog; part 2, the 1955 Supplement; and part 3, the new programs in 1956. The programs are arranged alphabetically by title within each of the three parts, and a subject index covers all programs listed in the catalog.

1957 Catalog of Cooperative Tests. Princeton, N. J.: Cooperative Test Service, 20 Nassau St. 1957. 72 pp. Free. A listing and description of tests available from the ETS.

1957 Directory of Camps Affiliated with the American Camping Association. Martinsville, Indiana: American Camping Association, Bradford Woods. 1957. 50c. Approximately 2500 camps are listed alphabetically by states. Information includes location of the camp; name and address of owner or operating organization; number, ages, and sex of children served; fees; facilities; and program features.

1958 Directory of Counseling Agencies. Washington 5, D. C.: American Personnel and Guidance Association, 1534 O St., N.W. 1957. 56 pp. \$1. Teachers, librarians, clergymen, guidance and personnel workers—all those to whom young people and adults turn with their questions on educational and vocational plans—will find this directory a valuable, much used resource book. It lists 143 agencies, located in all parts of the country, offering testing and counseling services which will help in making wise vocational and educational decisions. The agencies are listed by states and cities within the states. Referrals can be made to these agencies with confidence—each has been examined and approved by the Committee on Professional Practices of the American Personnel and Guidance Association.

Each approved agency has had to meet A.P.G.A.'s minimum standards of recognition by appropriate professional groups or qualified members of such groups, use of competent and qualified staff, adherence to accepted professional procedures, avoidance of questionable commercial publicity or advertising, and the charging of reasonable fees.

1956 Handbook on Women Workers. Washington 25, D. C.: Supt. of Documents. 1957. 104 pp. 35c. Brings together basic information on trends in women's employment and occupations, the age and marital status of women workers, their earnings and income, their educational status, and state laws affecting their employment.

Occupational Information for Counselors: An Annotated Bibliography. Washington 25, D. C.: Supt. of Documents. 1957. 15c. Lists approximately 120 publications prepared by the United States Department of Labor or by the department in cooperation with another agency. Designed for use primarily by counselors of young people, the bibliography represents one of the phases of the department's program to help people select and prepare for occupations in which they may find the greatest personal satisfaction.

In addition to publications giving general occupational and industrial information for the use of counselors, the bibliography lists materials on specific occupations and industries, manpower studies and reports, career and employment planning, counseling and related techniques, and periodicals. Publications giving background information on apprenticeship; child-labor standards; and wages, hours, and related benefits are also included.

The Occupational Outlook. Washington 25, D. C.: Supt. of Documents. 1957. (Vol. 1, No. 1.) 20 pp. \$1 per year for the 4 yearly issues; Single copies, 30c. *The Occupational Outlook* is a new periodical to be issued four times a year. It will channel to the vocational guidance profession current information available through the continuing research program of the Bureau of Labor Statistics in the occupational outlook field. It will also report upon studies and projects of special interest to counselors—conducted by other Bureaus in the Department of Labor and by other government agencies—which are not generally available to guidance personnel.

Opportunities for Women in the Biological Sciences. Boston 15: School of Science, Simmons College, 300 The Fenway. 1957. 4 pp. The February issue of *Simmons College Bulletin* which is published eleven times a year—each covering a specific guidance area. Principal may be placed on the mailing list.

Our Manpower Future—1955-65. Washington 25, D. C.: Supt. of Documents. 1957. 32 pp. 30c. Contains a series of 14 charts showing population and labor force trends during the next ten years as well as the impact of these trends upon the school system. The chartbook shows that by 1965 there will be approximately 79 million people in our labor force, 10 million more than in 1955. However, this 10 million increase will be made up of workers under 25 years of age, who are new to the labor force and generally inexperienced, and workers over 45 years of age. By 1965 there will actually be a decrease of about $\frac{1}{4}$ million in the number of men in the working age group of 24-34, in contrast to the previous ten years during which there was a substantial increase in this group.

PARKER, W. R. *The National Interest and Foreign Languages.* Washington 25, D. C.: Supt. of Documents. 1957. 139 pp. 65c. A discussion guide and work paper prepared by the author for Citizen Consultants and sponsored by the U.S. National Commission for UNESCO, Department of State. The purpose of the Citizen Consultation is to discuss whether or not the national interest would be served by increased study of modern foreign languages in the United States and, if so, what sort of language study would best serve both the nation and the individual citizen.

Although this booklet was written for the specific purpose as a work paper and discussion guide and is addressed to the *general public*, it is also a uniquely

authoritative treatment of a timely and important topic. One person has called the first edition "a rich store of facts and figures on the status of languages in this country and abroad," while another has recommended it as good reading for high-school students as well as adults.

PELLA, M. O. *The Status of Science Offerings in Wisconsin Schools in 1955-56*. Madison: School of Education, University of Wisconsin. 1956. 32 pp. A statistical study of 425 of Wisconsin's 445 high schools. The study points up the advantage larger high schools enjoy in providing good programs and suggests that the young person in the small school may be less likely to be challenged to develop to a maximum aptitude in a field such as science.

Policies of State Departments of Education for the Accreditation of Educational Experiences of Military Personnel and of Results on the Tests of General Educational Development, sixth edition. Washington 6, D. C.: American Council on Education, 1785 Massachusetts Ave. 1957. 80 pp. Contains the policies of the departments of education of the states and territories in granting academic credit for the educational experiences of service personnel and veterans.

Radiation Safety and Major Activities in the Atomic Energy Programs. Washington 25, D. C.: Supt. of Documents. 1957. 418 pp. \$1.25. Reports on the last six months of 1956. Part One discusses major activities in the atomic energy programs; Part Two treats on radiation safety in atomic energy activities; and the appendix contains other related material.

Rankings of the States. Washington 6, D. C.: National Education Association. 1957. 21 pp. Mimeo. 25c. Tables showing ranking of states on 32 different categories; also includes bibliography of 16 sources from which data were secured for the tables.

SCHLOSS, SAMUEL, and C. J. HOBSON. *Statistics of State School Systems: Organization, Staff, Pupils, and Finances*. Washington 25, D. C.: Supt. of Documents. 1956. 151 pp. 55c. Presents data chiefly for full-time elementary and secondary day schools. This is chapter 2 of the *Biennial Survey of Education in the United States*.

Scholarships, Fellowships, and Loan Funds, 1956. Albany 1: State University of New York. 1956. 108 pp. Describes the various types of financial aid given students of the State University of New York to defray the cost of higher education. More than 730 scholarships are described. The state of New York has a broad program of state-wide scholarships which are usable in the several college of the University, and includes some 3,300 scholarships available to residents of the state.

Shell Motion Picture Catalog. Flushing 58, N.Y.: Shell Oil Company, 160-07 Northern Blvd. 1957. 32 pp. Free. Describes the many 16mm sound movies available—free of charge—from Shell's film library. All motion pictures are professionally made, dealing with a wide variety of subjects. They are both entertaining and of outstanding educational worth. On the last page of the catalog are instructions for ordering Shell films, and the address of the regional film library.

Solving Problems with Paper Service. New York 17: Field Research Division, Paper Cup and Container Institute, 342 Madison Ave. 1957. 48 pp. Free. Offers solutions to many of the problems faced by officials in providing school lunches. Based on the actual experience of feeding authorities in the public schools, it includes information on many ways in which ingenious managers are meeting the difficulties of working with shortages of space, equipment, or funds. It gives case histories of situations where there is space

that can be made available but no preparation or dining facilities. In some of these situations food brought in on hot carts, or frozen in advance and heated at the point of service shortly before serving, is the solution.

Where some of the schools in a system have kitchens and others do not, the existing kitchens may be able to prepare food for the entire system with little extra load on their facilities and personnel, if work is properly scheduled. With this part of the job done, there are situations where it is a relatively simple matter to transport the food to schools without facilities and serve it. The booklet also includes some of the techniques in food service and handling that school managers are now using. They include proportioning of food, separation of foods, freezing, vending machines, and educational values.

Standards for Adult Program in the YMCA. New York 7: Association Press. 1957. 45 pp. 75c. Defines certain terminology widely used in YMCA's; offers assistance to those desiring to initiate work with adults; and suggests ideas and practices as helpful to local associations in their adult program work.

Also available from the same source and prepared for a similar purpose for youth is the booklet *Standards for YMCA Youth Program* (1956. 45 pp. 75c.)

STEPHENSON, MARGARET, and RUTH MILLETT. *As Others Like You.* Bloomington, Ill.: McKnight and McKnight Publishing Company. 1957. 84 pp. (5 1/4" x 7 1/4"). 80c. This booklet is written for young people. It presents material covering selected situations which young people meet and which are of concern to them. It helps them meet everyday situations with self-assurance founded on a sincere regard for others. It does not stress the "rituals of etiquette", but a way of thinking—a concern for the feelings of others. It tells why correct social usage is important, and makes young people realize why a consideration for the feelings of others is the basis for proper manners.

Since everyone wants to be liked, the type of information in this book helps young people meet this basic need. It is written in an easy-to-read, conversational style, and is cleverly illustrated to add interest. The many examples presented help point up the meaning and importance of proper social usage. With the complete index, answers to specific questions can be found in seconds.

The Story of the Dietitian in the United States. Chicago 11: The American Dietetic Association, 620 North Michigan Ave. 1957. 16 pp. 25c. Traces the role and professional development of the dietitian from the last decade of the nineteenth century to the present time. Also available from the same source is *Dietitians in Demand.* (8 pp.).

The Story of Power. Detroit 2: Educational Relations Section, Public Relations Staff, General Motors Corporation, P. O. Box 177—North End Station. 1956. 51 pp. Free. Traces the development of power from pre-historic days to the present with its jets and atomic energy uses.

SWANSON, NAOMI, editor. *Money Management, Your Clothing Dollar.* Chicago 1: Money Management Institute of Household Finance Corporation, Prudential Plaza. 1954. 36 pp. 10c. A booklet on clothing outlining the essentials of good wardrobe planning and showing how to choose the most flattering styles; how to recognize good construction and workmanship in men's, women's, and children's clothes; and how to care for clothes in order to keep them always at their best and ready for wear. It also provides basic information on fibers, fabrics, and special finishes as a guide in spending the clothing dollar wisely and in fitting clothing costs into the budget.

Vocabulary Helps for Beginning Reading. Minneapolis 13: Minneapolis Public Schools, Administration Bldg., 807 N.E. Broadway. 1957. 152 pp. \$4.50. This book is based on textbooks used in the first grade of the Minneapolis

elementary schools. It is a guide to aid teachers in establishing a reading sequence.

VROMAN, CLYDE, chairman. *Secondary School-College Co-operation, An Obligation to Youth*. Los Angeles 41: American Association of Collegiate Registrars and Admissions Officers. 1955. 136 pp. One Copy free. This volume is a report of a study in 1951 on high school-college relations to discover ways in which an understanding of each other's problems may be increased. Discusses our common problems, areas of common concern, historical background of secondary school-college relations, effective co-operation, and institutional state, national, and regional programs.

Your Opportunities in Industry as a Technician. New York 17: Education Department of the National Association of Manufacturers, 2 East 48th St. 1957. 32 pp. Free. Emphasizes the vital role and promising futures in this comparatively new and growing occupation. "There just aren't enough technically trained young people to go around—people who like mathematics and applied science and enjoy new work and hard work, people who are able to turn the theories and ideas, the drawings and doodles of scientists and engineers into wonderful, workable products and processes. This is the assignment of the technician," the booklet points out. This pamphlet on technical development is a companion piece to a similar educational aid published late last year by the NAM, which is entitled *Your Opportunities in Industry as a Skilled Craftsman*.

Publications Received Too Late To Be Classified

ALY, BOWER, editor. *Alexander Hamilton*. New York 23: Liberal Arts Press, 153 West 72nd Street. 1957. 287 pp. \$1.25, paper covers. This book contains selections which represent Hamilton's life, his thought, and his style. The editor has exercised a series of private judgments in choosing from available documents those which seem best to represent Hamilton writing and speaking as instruments of policy, and he has also endeavored to show the progress of Hamilton's discourse through the years from 1769 to 1804.

BINNS, ARCHIE. *The Headwaters*. New York 16: Duell, Sloan and Pearce. 1957. 286 pp. \$3.95. The first settlers in the beautiful but rugged Puget Sound country and the islands of its inland sea came from many lands, and sometimes they were glad to be alone and to forget the past in this new world. So it was with Tom Wells and Emily Barton, fugitives from a paradise on earth, driven by love to seek another start in this last rough frontier among the islands. But the past has its own inexorable way of overtaking those who run away. Their new-found land was not so wild and remote as Tom and Emily believed. Even as they discover friends, build their home, begin to make a decent livelihood, and find or create happiness in their wilderness beside the sea, the threat that haunts them seems ready to destroy all they have sought and gained.

BROOKES, EWART. *Rescue Tug*. New York 10: E. P. Dutton. 1956. 192 pp. \$3.50. The tang of salt water and the menace of giant seas are in this exciting story of deep-sea rescue tugs. In particular it tells of the gallant, but unavailing attempt of the English tug "Turmoil" to save the American freighter "Flying Enterprise," floundering in a hurricane at the turn of the year 1951-52.

Captain Kurt Carlsen, seaman of inexhaustible courage, hung on for sixteen days while the "Flying Enterprise," with a 60 degree list, met the fury of the

storm. And aboard the "Turmoil," with every device conceived by man for towing a ship, Captain Dan Parker took up the challenge and coaxed and nursed the dying freighter nearer to safety. The battle was lost, but the heroism and skill of the fighters form an epic of the sea.

BROOKS, Van W. *Days of the Phoenix*. New York 10: E. P. Dutton. 1957. 205 pp. \$3.95. The author here recreates the exciting cultural atmosphere of the period during and after World War I, when new ideas and passionate crusades seemed to be starting a fresh era in American life. A combination of personal reminiscence and literary history, this book throws new light on the many artists and writers Brooks knew and worked with in the hopeful Twenties—among them Edward Arlington Robinson, Sinclair Lewis, Theodore Dreiser, Sherwood Anderson, Waldo Frank, Hendrik Willem van Loon, Malcolm Cowley, John Dos Passos, and H. L. Mencken.

BROWN, FREDERICK. *Rogue in Space*. New York 10: E. P. Dutton. 1957. 189 pp. \$2.75. Crag was no weakling. He had been a spaceman in the twenty-third century, shuttling between Earth and Mars, until an accident claimed his left hand. Crag lost his rank and license, his wife deserted him, and Crag began a new life of smuggling, theft, and murder.

Crag was a marked man. Convicted on a framed-up criminal charge, he is promised his freedom by a politically powerful judge who offers him a dangerous assignment which may insure or destroy the freedom of the Earth. Freedom, a million dollars, and the temptation of the judge's beautiful wife, Judeth, take Crag to Mars where he is to steal from an eminent scientist a small disintegrator which can reduce matter to a small and totally inert mass.

Both Crag and the Judge had reckoned, however, without the rogue. The rogue was a unique being. He was a piece of rock a little over a mile in diameter, floating free in space. There are many such asteroids in the universe, all composed of dead, inanimate matter. The rogue was unique. He was aware, a thinking rock with unusual powers. When Crag is killed while trying to save the Earth, the rogue for the first time in the billions of years of its consciousness sensed a form of life other than his own. It is through this rogue in space that Crag receives another chance.

BURR, SYBIL. *Highland Fling*. Philadelphia 7: Westminster Press. 1957. 224 pp. \$2.75. Setting off in the "Wasp," Ross Mordley's newly acquired automobile of ancient and uncertain vintage, Holly Gordon, her friend Pauline Broome-Gilson (dubbed an affectionate "Pud" because of her generous proportions which yield only gradually to her determined attempts at dieting) and Ross, who is now a junior officer in the British Merchant Service, are bound for the Kinglas country in Scotland.

In an elegant tearoom where their modest budgets permit the ordering only of coffee and biscuits, they meet Lord Bills, recently knighted, who has come up the hard way and whose guiding philosophy is his firm belief that money can buy anything. He has rented Kinglas Castle because he wants to "found a family seat and be Lord Walter Bills of somewhere." Charlie Hampton, his Shakespeare-quoting chauffeur, is actually his adviser and tutor, for Lord Bills is determined to become a gentleman.

BYRON, GILBERT. *The Lord's Oysters*. Boston 6: Little, Brown and Company. 1957. 340 pp. \$4.50. Brimming with laughter, warm nostalgia and affectionate humanity, this book is the story of a boy named Noah and the wonderful life he lived—a little like Huck Finn's, a little like Penrod's, but altogether his own—on Maryland's easy-going Eastern Shore, in the gentler era America knew at the century's beginning.

If the good Lord watches over His erring children, He must have watched over Noah's father with special care. For like the lilies of the field, George Marlin neither toiled nor spun if he could possibly avoid it. To the regulated security of the factory whistle, Noah's Dad preferred the free life of the river and the bay, fishing, seining soft shell crabs, raking oysters, or merely loafing along in his little bateau, with its one-cylinder engine popping like a Gatling gun. The Marlins never had much but somehow they always got by.

As for Noah's Mama with all her talk of Dad's getting a steady job and setting the boy a respectable example—secretly, that peppery, loving woman probably would not have wanted her man to be any other way. And as for Noah, he simply loved them both and hoped to be just like his Dad, if Mama would only let him.

CLEMENSEN, J. W.; T. G. LAWRENCE; H. S. HOYMAN; and W. R. LA PORTE. *Your Health and Safety*, fourth edition. New York 17: Harcourt Brace and Company. 1957. 576 pp. This high-school text is divided in eight units: Unit 1, You; Unit 2, Your Supply System; Unit 3, Your Food; Unit 4, Your Appearance; Unit Five, Your Habits and Personality; Unit Six, Your Emotions and Personality; Unit Seven, Your Part in Preventing Disease; and Unit Eight, Your Part in Preventing Accidents.

In Unit 1 the pupil reads about the ways in which his body will change in the next ten years; in Unit 2 he learns the story of his body and how it is nourished by the blood and how it functions; in Unit 3 he reads about the food he eats and how it is digested; Unit 4 is the story of how he appears before other people; Unit 5 and 6 deal with his thinking, his habits, his emotions, and the development of his personality; Unit 7 contains information about what he can do to guard his health; and Unit 8 is the story of safety.

Each unit begins with an introduction plus a health check up that will help the pupil to discover how much he knows about himself and how well he follows good health practices. Each of the thirty chapters composing the eight units begins with a study guide as a preview of what the pupil will be studying. Within the chapters are suggested activities to help him understand what he is reading. Also included in each chapter is a summary.

CLEMENT, HAL. *Cycle of Fire*. New York 3: Ballantine Books. 1957. 185 pp. Paper, 35¢; cloth, \$2.75. A science-fiction story.

COOK, L. B.; WALTER LOBAN; RUTH M. STAUFFIC; and ROBERT FREIER. *People in Literature*, revised edition. New York 17: Harcourt Brace Company. 1957. 704 pp. The aim of this book is to help the pupil make a connection between his reading experience and his daily life by bringing to the high-school reader an awareness that literature is about life, that it is a part of life. It aims, also, to influence the reader to become increasingly mature in his attitudes and behavior. It does this by presenting literature as a record of human experience. The people in the stories, poems, articles, and plays have problems, feelings, and aspirations which the young reader can understand. He can apply them to himself because he has some of these same problems, feelings, and aspirations. Purposefully taught and thoughtfully read, the selections in this book will promote the growth of the high-school student as an individual and as a citizen of his community.

For such growth to take place, the student needs literary experiences that build upon his own. Otherwise his contact with literature is an artificial thing, something for him to endure for one period a day and to avoid during the rest of his conscious moments. To give purpose and direction to this growth, the selections have been arranged in units related to themes that have importance

for the young reader. The first unit stimulates interest with experiences of youth. It culminates with a series of episodes from one of the most perceptive studies of growth to maturity ever written—*The Autobiography of Lincoln Steffens*, a modern classic. Succeeding units reach out beyond the young person himself to his home and family, to people in other countries, and to civilizations which once flourished and then declined. "Roads to Success," "The March of Freedom," and "The Growth of the Mind" offer inspirational examples from the lives of people who have influenced the progress of civilization; they also provide opportunities for reflection about what constitutes freedom, success, or a liberally educated mind. The final unit invites the reader to look forward to the kind of future which awaits him.

Vocabulary development is provided for in a number of ways. The extensive use of footnotes puts the most difficult or special-context words at the bottom of each page for the reader's convenience. Words of borderline difficulty are included in a glossary, new to this edition. The various "Word Mastery" sections include studies of derivations, figures of speech, idioms, and the use of contextual clues to determine meanings.

COPLAND, AARON. *What To Listen For in Music*. New York 36: McGraw-Hill Book Company. 1957. 319 pp. \$3.95. This new edition has been brought up to date to make it even more useful to the large group of music lovers who today have so much more music available to them on records. Chapters on contemporary music and film music have been added. Also new is a list of recorded music with relation to the chapters and to the development of a basic knowledge of all forms and types of music; and a selected list of books for further reading.

The author first discusses the creative process and the elements of musical anatomy—rhythm, melody, simple harmonic structure. He then gives a full and clear explanation of the principal musical forms—simple dance forms, the fugue, the variations, the sonata, the symphony, the symphonic poem, the opera. In conclusion he explains the role of the interpreter as it affects the listener's understanding of the composer's work. Throughout the book the author emphasizes the fundamental continuity of musical growth from the old to new, or "modern," music, and his treatment prepares the reader to understand contemporary music in the same terms as older music.

COTTRELL, DOROTHY. *That Dog Spike and Other Stories*. New York 36: Teen Age Book Club. 1957. 160 pp. 25¢. Behind a face like a horrible accident, Spike carried the heart of a little child. He packed in his massive body more fighting courage and great gentleness to the ounce than anything else that snores. Also in this book is "Wilderness Orphan"—a kangaroo forced to become a boxer—; and "Little Fellow"—a story of a pony lost in the Australian bush.

CRAVEN, AVERY. *The Coming of the Civil War*. Chicago 37: University of Chicago Press, 5750 Ellis Ave. 1956. 505 pp. \$5. The battlefields of Shiloh and Gettysburg have long been silent. The men who fought and died in that tragic event of a century ago are now part of American legend; the cannons and bayonets of that cruel war are now the souvenirs of American history. Yet the provocative question remains, "Why did it happen?"

This new edition, with a new Preface and important revisions in three chapters, is a presentation of the facts which caused the division of a nation and which brought that nation into war with itself. The author takes issue with the view that the Civil War was the product of contention over slavery and States Rights and shows that the real causes were far more complex. Here is

an analysis of the Civil War which thoroughly rejects the picture of the South as united in 1860. It shows that there were really three Souths, a distinction requiring an entirely new evaluation of northern policy on the eve of conflict.

CRONYN, G. W. *A Primer on Communism*. New York 10: E. P. Dutton. 1957. 190 pp. \$2.50. This book contains answers to 200 questions selected from more than 1,000 actually posed by students, businessmen, clergymen, teachers, farmers, housewives, and industrial workers, and deal with communism in all parts of the world. The facts presented—the names, dates, and actual examples of Communist activity—add up to a stunning indictment of the Communists and their methods. This book is objective, informative, and concise. It is designed for people who wish to understand and learn how to deal concretely and unemotionally with the Communist challenge. It is written clearly and straightforwardly so that young people as well as their parents will find it useful.

DOWNEY, FAIRFAX. *General Crook: Indian Fighter*. Philadelphia 7: Westminster Press. 1957. 192 pp. \$2.75. This is a fictionalized biography about the man whom General William Sharman called the greatest Indian-fighter and manager the Army of the United States ever had. It traces the development of a fine soldier and leader of men. From boyhood years spent in his father's farm in Ohio through his surprise appointment to West Point, George Crook showed the fine character traits that made him an outstanding general.

Sent to the West after graduation from West Point, Lieutenant Crook faced Indians for the first time. Already a crack shot and an avid hunter, he trained himself to be an expert trail follower and to understand Indian ways. The Civil War interrupted his dealings with Indians, and Captain Crook led his command in some of the bloodiest fighting of the war. Although his demands were great, his men were devoted to him, and he rapidly rose from captain to major general.

DU MAURIER, DAPHNE. *The Scapegoat*. Garden City: Doubleday and Company. 1957. 348 pp. \$3.95. The Englishman and the Frenchman continued to inspect each other—astounded that they could look so alike and not have known of each other's existence before this moment. The problems that each had considered so vital before that instant of uncanny recognition were forgotten as they began to talk. It was not until the next day when John, the Englishman, awoke that he realized he had talked too much. His French companion was gone; John had been trapped into taking the place of the Comte de Gue, head of a large family—master of a chateau.

Not since *Rebecca* has the author written a novel so full of a sense of mounting excitement, of a "wanting to know what is going to happen." Loaded with suspense and wit, this book has a double fascination: John's manipulations to escape detection by the Comte's large family, his servants, his mistresses; and his constant and frustrating attempts to discover the enigmatic evil that dominates all who live within the chateau—without asking the questions that would give him away.

Economic Development Assistance. New York 22: Committee for Economic Development, 444 Madison Ave. 1957. 40 pp. Single copies. 25¢; special arrangements for quantity orders and for classroom or other educational use. CED's Research and Policy Committee presents a long-term policy for assisting economic growth and encouraging independence in the underdeveloped nations of the free world.

Economic Status of Teachers in 1956-57. Washington 6, D. C. National Education Association. 1957 (February). 28 pp. 25¢. This report brings together

a number of tables and charts to answer the questions most frequently received by the NEA Research Division on the economic status of the teaching profession. It presents the latest figures on consumer prices, purchasing power of the dollar, teachers' salaries, earnings of other occupational groups, and the impact of Federal income taxes. The discussion is held to a minimum as tables and charts are largely self-explanatory.

FOLEY, MARTHA, editor. *Best American Short Stories of 1956*. New York 3: Ballantine Books. 1957. 382 pp. 50¢. This is the 41st annual volume and contains 27 stories selected from popular magazines.

FRENCH, W. M. *American Secondary Education*. New York 3: Odyssey Press, 55 Fifth Ave. 1957. 543 pp. \$4.25. This book presents an over-view of America's secondary schools. In it he gives attention to the origin and historical development of the American secondary school, describing our European heritage, the Latin Grammar school, the academies, the struggle for the free high school, etc. He discusses such areas as curriculum; articulation; counseling; the normal, gifted, and the slow learner; and extraclass activities. Included also is a chapter each on the private and parochial secondary school. The author devotes a chapter each to the secondary school and the community, administration of the secondary school, the future of secondary education, and a philosophy of secondary education. Indexed.

GARRETT, H. G. *How To Hold an Audience*. New York 3: Citadel Press, 222 Fourth Ave. 1957. 191 pp. \$3.50. This is not so much a book on speeches as a book on what a person must be, know, feel and do before he faces any audience to deliver a speech, sermon, lecture, eulogy, or "a few words." It is a complete, concise, and helpful course in the five basic elements that can make or break a speaker: ideals, organization, emotional state, voice, and manner.

The book shows how to produce the "exact word" instantly, no matter what distractions are faced. It gives life-saving pointers on the very problems that haunt even the most experienced speakers . . . what to do with his hands . . . how to stand so that the audience sees only what he wants it to notice . . . where to look when he speaks . . . and how to make his eyes help his voice . . . how to make his gestures look so natural that only he knows that they are contrived . . . how to speak so strongly that he is heard in the back of the room, yet never becomes the slightest bit hoarse. It shows him how to overcome such stumbling blocks as nervousness, self-consciousness, and the awkward moments that come to all when they stop to grope for the "right word." Special chapters are devoted to developing the right voice, manner, appeal and fluency. In addition, there are chapters on the correct procedure for the chairman, general organization of meetings, committees, after-dinner speaking, and other types of social occasions.

GORSKY, BERNARD. *Vastness of the Sea*. Boston 6: Little, Brown and Company. 1957. 315 pp. \$5. This is the recorded story of four daring Frenchmen who came as close as men can to becoming creatures of the sea. On a voyage of adventure that carried them 15,000 miles across some of the earth's remotest tropical waters, they swam in pursuit of huge mantas and leopard rays, hunted and were hunted by sharks and barracudas, and caught in magnificent photographs the incredible color and variety of the life of coral reef and sea floor.

Led by the author, the quartet sailed westward from Tangiers to Tahiti, exploring with masks, flippers, cameras, and spears the underwater seascapes of every ocean on their way. Fabulous places well off the beaten track fill the log of their journey: the Canaries, Martinique, the Grenadines, Kingstown, Bird Island, World's End Reef. And in the pacific, there were the Galapagos, their

jump-off spot for the 3000-mile crossing to the Marquesas and Taumotus, where they lived and dived with the easygoing islanders. The resultant story takes the reader into a fascinating world so far from everyday experience that it could be part of another planet.

GRiffin, VELMA. *Circus Daze*. Philadelphia 7: Westminster Press. 1957. 191 pp. \$2.75. Mark Farnsworth, an orphan, wants to be popular, but to get attention he is always doing the wrong thing. After one such incident he is so disgusted with himself that he decides to run away and join his aunt and uncles, who are performers with the circus.

The maze of tents, cages, wagons, and the constant activity around the lot, promise Mark a new and exciting life, but he soon realizes that the gay atmosphere of the circus is not going to make his life one long holiday. On his first day with the circus, Mark and his young cousin, Kay, are attacked by an escaped lion, and only the quick thinking of Feodor, a veteran clown, saves them from being killed. Feodor is badly injured, and Mark blames himself for the accident. During his convalescence, Feodor asks Mark to take his place and work with his trick dog, Tinker. As a new performer with the circus, Mark makes many mistakes and gets into difficulties.

HALL, R. H. *Green as Spring*. New York 3: Longmans, Green and Company. 1957. 220 pp. \$3. Growing up was not funny, at least not to Frannie Gay. She made faces at herself in the mirror. But that didn't do any more good than helping at the church fair, or playing the outfield to please Mickey. How do you convince creatures who had dunked you in their mud pies that you were grown up? A girl known as Killer, of course, had all the answers. For instance when she suggested that Mickey invite Killer to play baseball, Frannie was horrified to hear him reply he'd rather see that girl on the dance floor. It wasn't fair! Killer was about as mean as they came.

HUGGINS, A. M., and H. L. ROBINSON. *Wan-Fu*. New York 3: Longmans, Green and Company. 1957. 190 pp. \$2.75. On the Tientsin Highway, China's desperately poor begged for their daily bread. One-Leg, a crippled beggar girl, was carried there on the back of her blind father as they struggled to gain a few coppers to buy their frugal daily meal. One day the fourteen-year-old girl picked up a purse belonging to Merchant Huang who had been kind to them. Though it lay heavily on her conscience, One-Leg could not give it up. She had much else to worry about at the time of the Mid-autumn Festival, a time for family reunions and feasting. On the eve of the holiday, the father was killed by an automobile and the daughter woke up in the hospital.

JENNINGS, F. G., and C. J. CALITRI. *Stories*. New York 17: Harcourt Brace and Company. 1957. 432 pp. This is a collection of 50 stories for pupils in grades ten to twelve. The stories are classified under three divisions: Part 1, Stories of Impact; Part 2, Stories of Depth; and Part 3, Stories To Think About. Part 1 is composed of 12 stories that can be read and grasped in 15 minutes each. This section provides stories for the beginning of the course in which the essential skills and ways of story telling can be learned; Part 2, likewise composed of 12 stories, deals with characterization; and the third part (8 stories) revolves around fundamental human problems and values. Included also are 18 short poems. A 32-page *Teacher's Guide* is bound into the teacher's edition.

JOLLIFFE, NORMAN. *Reduce and Stay Reduced*. New York 20: Simon and Schuster. 1947. 284 pp. \$3.50. In this book, the author, one of the world's foremost authorities on nutrition and health, says that people are neglecting to take advantage of the most important single thing they can do that will

simultaneously make them more attractive, feel better, and live longer. He criticizes all the popular misconceptions about reducing; the fad diets; medication; exercises; and gives the reader authoritative medical reasons why the only sure, safe, and permanent way to attain and maintain proper weight is to regulate the appetite, once and for all.

Reading the first part of this book is a course in nutrition. The serious dieter needs this information, because it gives him the "why?" of the "how-to-do-it" chapters which follow. Without such background, the enthusiastic but uninformed dieter may well lose weight, but he may do so at the cost of health and appearance, and when he stops dieting, he will probably regain all he has lost. However, once he knows the principles of sensible and nutritious eating, he will be able to follow the author's specific diets with confidence and understanding, knowing that the goal he has set himself will benefit him all his life.

JOYNSON, D. C. *A Guide for Games*. New York 16: Philosophical Library, 15 East 40th Street. 1957. 302 pp. \$7.50. This book contains a description of about 1,000 individual and team games. It forms a practical reference guide to new games and old favorites suitable for boys and girls ages 8 to 18 taking part in organized recreation. Subjects include the planning of a lesson; partner, relay, and minor team games; competitions; and sports. It is a useful source for games and general recreation for physical education and games period.

KENYON, F. W. *Mary of Scotland*. New York 16: Thomas Y. Crowell. 1957. 352 pp. \$3.95. The author now adds Mary, Queen of Scots, to the gallery of history's most glamorous women so successfully portrayed in his previous novels—Marie Antoinette, Josephine in *The Emperor's Lady*, and *Lady Hamilton* in *Emma*. And the generous and beautiful Mary, caught in a web of politics and religious bickering, is as appealing and credible as all the author's heroines.

Back from France after the death of her husband, the Dauphine, the young Mary found her country on the brink of civil war. Protestant Scotland under the lead of Knox was ready to fight against a Catholic Queen; her people, resentful of her French mannerisms and thick French accent, were only too willing to believe the scandalous gossip about her court; her half-brother James, interested in his own struggle for power, led her into controversy with the wily, independent Scottish lords; and the gay and gallant girl found herself irrevocably involved in a game of power politics with the shrewd, unrelenting Elizabeth.

KEY ALEXANDER. *Cherokee Boy*. Philadelphia 7: Westminster Press. 1957. 176 pp. \$2.75. It is 1838. The Army has orders to remove the Cherokee nation from Georgia and the Carolinas so that white settlers can take over the Indians' rich land. While his father and other important men of the tribe are in Washington to appeal this harsh sentence, fifteen-year-old Tsi-ya, the Otter, has been hurriedly sent to the Secret Place of the wise man of the Cherokees. Tsi-ya reaches the hidden valley where the sage lives. But when he returns with word for his people to seek refuge in the Secret Place the soldiers have already arrived. Tsi-ya, with his mother and brother, is sent to the stockade. With relatives and friends he awaits the beginning of a long march west.

Thus begins the Trail of Tears to Indian territory. Thousands die on the march, Tsi-ya's mother among them. But with the help of a medical missionary, Tsi-ya lays plans for escape. From Illinois he starts the incredible feat of a journey over five hundred miles back to his mountain homeland in the middle of winter. With his brother, two girl cousins, and another run-away Cherokee, Tsi-ya undergoes almost impossible tests of endurance, courage, and ingenuity. The young Cherokees face the crossing of the icy Ohio River, a great blizzard

in Kentucky, hostile whites eager to turn them in, and a huge wolf who follows their trail and snatches their food. They have several narrow escapes from death, and, even when their journey's end seems within reach, more danger awaits.

KJELGAARD, JIM. *A Nose for Trouble*. New York 36: Teen Age Book Club, 33 West 42nd St. 1957. 192 pp. 25¢. Trouble meets Tom Rainse as he steps off the train. Searching for peace and good fishing, he rides smack into a war between game wardens and mountain men. When the secret gang leader orders him to get out, Tom signs up as a warden.

MANTLEY, JOHN. *The 27th Day*. New York 10: E. P. Dutton. 1957. 248 pp. \$3.50. The time is a not-too-distant tomorrow. But for the five people concerned—ordinary citizens of the world in which we live—the problem is an overwhelming one. Each of the five was to accept responsibility for a weapon which could mean the end of all human existence. Each of these men and women is given a box containing golden capsules of awful potency. The owners alone can open the boxes, but, once they do, anyone can loose the destructive forces of the capsules. Theirs is the challenge to guard the capsules for twenty-seven days or risk the end of the human race.

Masaccio, *Frescoes in Florence*. Greenwich, Conn: The New York Graphic Society, 95 East Putnam Ave. 1957. 22 pp. plus 33 pages of full-color reproductions (18½" x 13½"). This is Volume VII of the UNESCO World Art Series. Originally announced as *Italy*, Masaccio is the first book of the UNESCO series to be devoted to the work of a single artist. However, the importance of Masaccio in the history of art as the key figure of Renaissance painting in Italy has made this publication an exception to the rule that each volume of the World Art Series must deal with the largest possible aspect of a nation's artistic expression.

Masaccio, who lived a brief 27 years at the beginning of the fifteenth century, is regarded today as the grand master in Florence of the Renaissance; and these walls of the Brancacci Chapel and the Church of Santa Marie Novella were the school house of such later giants as Leonardo, Botticelli, Raphael, and Michelangelo.

All the plates in *Masaccio* are entirely new and were made from new transparencies. The text, which was written especially for UNESCO by Sir Phillip Hendy, Director of London's National Gallery, is characteristic of the Series in being short but informative and appreciative. For further details on the book and the remarkable character of its subject, the reader is referred to the excellent article by Gabrielle Cabrini in a recent issue of the *UNESCO Courier*.

MCCULLOCH, MARGARET. *Second Year Nurse*. Philadelphia 7: Westminster Press. 1957. 189 pp. \$2.75. Jan Russell had always planned to go to college, but the death of her doctor father causes her to reconsider her future goals. Dr. Russell, for many years a general practitioner, had devoted his life to helping people. Jan realizes she wants to do things for people too, that she wants to be a nurse more than anything else in the world. Jan finds that a student nurse's life is not easy for a sensitive girl who puts her entire heart into everything she does. Difficult patients present a real challenge to her understanding, and there is heartbreak over the patients who cannot recover.

MERRETT, JOHN. *Captain James Cook*. New York 10: Criterion Book, 257 Fourth Ave. 1957. 192 pp. \$3. In this new biography of one of history's greatest and most fearless seamen, the author tells of Captain James Cook's pioneering voyages in search of an unknown Antarctic Continent—and later, in quest of a Northwest Passage above the Bering Strait. Before his tragic

death in 1779 at the hands of the Hawaiian Islanders, Captain Cook sailed the Pacific from its far southern reaches to the icy Arctic. He was the first commander of a ship to cross the Antarctic Circle. He marked new lands on our maps and charts, and opened a whole new world to succeeding generations.

MILLS, H. H., and H. R. DOUGLASS. *Teaching in High School*, second edition New York 10: Ronald Press. 1957. 526 pp. \$5.75. This comprehensive new textbook provides a basic study of general teaching methods at the high-school level. It orients the teacher-in-training to his task in the world of today—his responsibilities toward his pupils, teaching objectives, his functions in and outside the school, and his own personal welfare. The chief emphasis is upon effective application of sound principles of teaching and learning in attaining the goals of secondary education.

While directing learning in its various aspects is the principal theme, the book treats other functions of the teacher such as participation in curriculum construction, measurement and evaluation of students' progress, counseling and guidance, and application of research findings. The utilization of community resources in teaching is explained, along with today's opportunities for leadership in extracurricular activities and participation in school public relations.

In keeping with the emerging concepts of teaching and the increasing use of new instructional materials, the authors discuss cooperative learning activities, teaching the core curriculum, the use of television in teaching, and preliminary instructional planning. They fully explore important questions of professional ethics. They give attention to professional problems such as securing a position, establishing professional relationships, and utilizing the means of in-service growth. The book is based upon the consensus of research findings, reports of successful teaching experience, and implications of sound growth and learning principles.

MIRKIN, S. M. *When Did It Happen?* New York 3: Ives Washburn, Inc. 55 Fifth Ave. 1957. 444 pp. \$5.75. This dictionary of dates is offered as history in capsule form to the host of writers, editors, journalists, broadcasters, filmmakers, librarians, teachers, school and college students, and all those seekers of fact who are confronted with the perennial question, "When did it happen?" Individuals and offices, engaged in communicating with the public through the press and radio, advertising and television, will find this volume a source of ideas and a valuable reference.

The entries are arranged chronologically by days throughout the year. Under each day is a varied selection of facts, events, trends, human-interest items that made the news in other years. For the reader who wants to find out when a particular event occurred, the subject index of some three thousand listings will point to the answer.

MORRIS, P. A. *Boy's Book of Frogs, Toads, and Salamanders*. New York 10: Ronald Press. 1957. 244 pp. \$4. This book describes and illustrates all the common amphibians of North America. The text gives information about the habits, physical characteristics, and life history of frogs, toads and salamanders. The reader learns where to look for the various amphibians, how to identify them, and how to capture them. Their care in captivity and their preservation as a permanent study specimen are explained. The sparkling photographic illustrations help in the sure identification of the different species and, in many cases, their eggs. In short this book tells about these fascinating animals that can be found in his immediate neighborhood, are easy to capture and safe to handle, and thrive in captivity.

MORRIS, R. B., editor. *The Basic Ideas of Alexander Hamilton*. New York 20: Pocket Books, 630 Fifth Ave. 1956. 479 pp. 35¢. An authoritative collection of the writings of this great American, selected from private letters, contemporary newspapers and pamphlets, and from collection at the Library of Congress.

MUIR, ROBERT. *The Sprig of Hemlock*. New York 3: Longmans, Green and Company. 1957. 314 pp. \$3.95. This is a story of men pushed to the limits of their endurance, beside themselves with worry and debt. It is the story of a group of Massachusetts farmers who, in 1786, had won liberty from the tyranny of a king, but had not yet forged for themselves the tools of self-government. Taxes and debts threatened to wipe them out; so they took the only kind of action they knew against oppressive authority—armed rebellion. At first, bewildered and desperate, they merely begged for time to pay their debts without being thrown into prison, but soon hot words demanded action. Looking back, their leader, Daniel Shays, could not quite remember how it started nor why it grew; looking ahead, he did not know where it would end. Malcontents, drifters, grafters, and scoundrels joined with honest men to become Regulators and wear the sprig of hemlock.

NEMEROV, HOWARD. *The Homecoming Game*. New York 20: Simon and Schuster. 1957. 255 pp. \$3.50. The scene is a small, good college. The protagonist is Professor Charles Osman, a young man of pleasant humor, seriously devoted to his profession. Charles lives comfortably with his high principles until a crisis occurs and he tries to put them into action. Then he discovers that other men, who also regard themselves as highly principled, have wonderful reasons for opposing him. Certainly Charles expected a few repercussions when he gave a failing grade to the star of the football team, thereby disqualifying him on the eve of the season's most important game.

He is, therefore, not altogether surprised when he is visited by two Big Men on campus who don't even bother to sugarcoat their blackmailing tactics. But he is slightly taken aback when the president of the college, whom he has always liked and respected, suggests that although, of course, he is *against* overemphasis on football, and *with* Charles in his passion for justice and honor—still, there wouldn't be much harm, would there, in giving the boy a make-up exam before the game? He is further shaken when two of the college's most important, and worthy, alumni line up against him and add their not inconsiderable pressure. And when the football player's girl tries to get round him, her charm, beauty, and intelligence add to his problems.

NORTH, STERLING. *George Washington, Frontier Colonel*. New York 22: Random House. 1957. 192 pp. \$1.95. From the age of 12 until his death, Washington enjoyed surveying farms and fortifications. He was interested in the building of canals and the draining of swamps, the breeding of better horses and dogs, and the cultivation of fruit and flowers. In almost everything he tried he was excellent, with the single exception of writing poetry. The love lyrics he wrote to the girls, most of whom were unkind to him, were so clumsy they were amusing. There was nothing amusing, however, about his bravery. A major at the age of 21, a lieutenant-colonel at 22, the hero of Braddock's defeated army at 23, Washington was a courageous frontier fighter.

NORTON, T. J. *The Constitution of the United States*. New York 17: Constitution and Free Enterprise Foundation, 210 East 43rd Street. 1956. 336 pp. Paper 60¢; cloth, \$2. A handbook for citizens and public officials. This book explains, by notes, every line or clause of the Constitution that has a story

or drama from history back of it, or that has contributed to the welfare of mankind during the 156 years of our life under this document.

O'CONNOR, PATRICK. *Gunpowder for Washington*. New York 3: Ives Washburn, 55 Fifth Ave. 1956. 159 pp. \$2.75. Lieutenant George Royall found himself the man of the moment at a crucial point in the American Revolution. He had been sent to the West Indies to bring back eighty tons of gunpowder, which was desperately needed by General Washington. Only the Dutch could supply it, and the British were determined to prevent its delivery to the rebels.

Lieutenant Royall was obliged to set sail in little better than a leaky tub and was thus at the mercy not only of the better-equipped British men-of-war but also of treacherous weather. A hurricane blew up, a British ship waylaid him, and he faced an almost impossible task of escaping from a blockaded harbor once he had taken on his deadly cargo. How he handled these obstacles makes for exciting storytelling. The reader who lives through every minute of this mission with the lieutenant and his men finds a new understanding of the price of victory in this struggle for freedom.

OKUMIYA, MASATAKE; JIRO HORIKOSHI; and MARTIN CAIDIN. *Zero*. New York 3: Ballantine Books. 1957. 320 pp. 50¢. This is the absorbing and historical story of the greatest naval war in American history—as seen by the enemy. From the crushing attack at Pearl Harbor, through victories in the Philippines, the sinking of the *Prince of Wales* and *Repulse*, the battle of the Coral Sea and of Midway, to the final months, this is the account of Japan's gamble for victory and her bitter defeat under the pounding blows of the American B-29 bombers.

O'NEILL, EGAN. *The Anglophile*. New York 18: Julian Messner. 1957. 265 pp. \$3.95. Fashionable society idolized Dennis McDermott, as a handsome, rakish man of their own world, never suspecting that he was the mysterious leader of the Irish underground whose missions continued to outwit the British authorities. From the time he was smuggled to France as a boy to obtain the education denied him in Ireland by the Penal Laws, he was consumed with hatred of the English. The memory of his father's corpse hanging from a gallows and his mother's scream haunted him until he had only one purpose—to return and fight. When he did return to Dublin, it was ostensibly as a gentleman-lawyer wearing the mask of Anglophile, the name for native Irish who renounced Catholicism for the Church of England. But actually it was to join a group of Patriots and risk his life day and night arranging for young boys to be smuggled out of the country as he had been.

The arrival of Anne Deering, a young English heiress and niece of one of his prominent clients, presented him with the opportunity he sought. By marrying her, he could solidify his position as Anglophile, achieve wealth and position, and contribute heavily to the Irish cause. Completely aware that one day his luck might run out and that Dennis McDermott, elegant Anglophile gentleman, might be hanged as a traitor, he still had not counted on the persistent efforts of Major Sir Harry Quintain, Anne's old friend and rejected suitor, to destroy their marriage by ferreting out his secret activities. Nor had he planned to fall in love with Anne.

PASCHAL, NANCY. *Someone To Care*. Philadelphia 7: Westminster Press. 1957. 208 pp. \$2.75. Left alone after the death of her father, sixteen-year-old Betty Fondren faces a future filled with uncertainty. With no place to live and no reserve funds, she is forced to leave high school and work to support herself. Newcomers in town, Andra Danna, a famous author, and

Irene Shapp, her secretary, employ Betty to clean the attractive cottage they have leased for a year. Their sophistication puzzles Betty. As a tenant farmer's daughter, she has never come in contact with their kind of life. With new horizons opening up, Betty takes a closer look at herself. Miss Danna enjoys her questions and lends a helpful hand in assisting the young girl to select flattering clothes and apply make-up. She even progresses from household duties to holding copy while the famous author reads proof.

PAULSON, JACK. *Side Line Victory*. Philadelphia 7: Westminster Press. 1957. 185 pp. \$2.75. Jerry Dale, small-boned and slender, is no weakling, but he isn't heavy enough for the football team. Crushed is his dream of following in the footsteps of his illustrious uncle, Grant Dale, and becoming an All-American player. He can, however, work toward his other ambition—to become a fine sports writer like his Uncle Grant.

As freshman sports columnist for the Woodview High School paper, the *Index*, Jerry senses trouble ahead. Chick Yount, Pete Dalliot, Dave Barnes, and Swede Larson, the team's smooth-working leaders, have been dubbed "the Big Four of Woodview" by a metropolitan newspaper. They are looking forward to another season to polish the tricky plays that brought them glory.

New football coach, Clair "Bill" Randal, however, has different plans for the team. Fresh from working with a six-man football team at a prep school, he can see the weaknesses in the Big Four's flashy playing and wants the team to work on solid ground plays. Chick Yount resents suggestions for change and leads the Big Four into open clash with the coach. Their rebellion puts the team's standing in the league in serious jeopardy.

PETERSON, THEODORE. *Magazines in the Twentieth Century*. Urbana: University of Illinois Press. 1956. 469 pp. \$6.50. Critics and social scientists have devoted much time in recent years to analysis and evaluation of television, radio, movies, and the book publishing industry. But another vast form of mass communication, the modern popular magazine, has received very little serious study. The author traces the modern magazine from its beginnings in the late nineteenth century through 1955 by drawing on a variety of sources: on the magazines themselves, on corporate records of magazine publishers, on reminiscences of men in the field, and on the small body of research that does exist.

The author's aim is to explore the major tendencies in the magazine industry and the social and economic forces which helped to shape them. Advertising and circulation, editorial policies, trends and taboos, big-name writers and big-name editors, and the tremendous impact of the low-priced magazine on the reading public—all these topics are discussed as they apply to such familiar household words as *Life*, *Time*, *Saturday Evening Post*, *Reader's Digest*, and many others.

POHL, FREDERIK. *Edge of the City*. New York 3: Ballantine Books, 101 Fifth Ave. 1957. 156 pp. 35¢. When Axel North came to the waterfront looking for work, he was a man on the run, fearing the world and hating himself—as alone as a man can be. It was Tommy Tyler who showed North what a man can do when he has pride and courage. In the brutal warfare of the docks, he offered North his strength, his friendship, and—if necessary—his life.

REBUFFAT, GASTON. *Starlight and Storm*. New York 10: E. P. Dutton. 1957. 189 pp. \$5.50. The author, member of the famous French team which conquered Annapurna, recounts here his thrilling adventures in climbing, by the most perilous routes, six classic Alpine peaks. He also provides a long opening section on the most up-to-date climbing methods: what clothing and

other equipment to select; why technique and planning are necessary; rock technique (with and without artificial aids); ice technique and the use of the ice ax and crampons; safety measures and the joys of climbing. Throughout, the author, a professional Alpine guide whom Sir John Hunt describes as "an intensely human person, who has discovered through the medium of mountaineering the true perspective of living," reveals a magnificent personal philosophy which will be an inspiration to mountaineers everywhere.

The author made the six ascents described in his book in the 1940's and 1950's. These six great faces present the most dangerous technical problems for the climber, and have challenged many, some to their death, over the years. The north face of the Grandes Jorasses nearly destroyed the author, and did kill one of his companions on an ascent of the Central Spur, when they were struck by falling rocks. The ascent of the northeast face of the Piz Badile, with its smooth, straight wall 3,000 feet high, was complicated by a spectacular thunder-storm. Climbing the north face of the Drus near Montenvers, the north face of the Matterhorn (which the author calls "the ideal peak"), and the Cima Grande di Lavaredo with its spectacular overhang were all thrilling achievements. But the most exciting exploit of all was the ascent of the north face of the Eiger. Here, halfway up the snow-swept, 5,000-foot face, a storm immobilized the author and his companions for several days and nights and forced them to finish the climb under conditions of unbelievable severity.

ROBERTS, R. W. *Vocational and Practical Arts Education*. New York 16: Harper and Brothers. 1957. 647 pp. \$6. This is a study of the origins, development, principles, relationships, and present practices of vocational and practical arts education in the public secondary schools of the nation. Consideration is also given to the history and development of some of the programs closely related to vocational and practical arts education and to some of the organizations and agencies with which vocational educators are associated. It should serve as a means of coordinating the several programs represented so that a vocational teacher in one area of such education may know something about the principles and practices suggested for teachers in other areas.

Special consideration is given to the development and current practices of Federally aided programs of vocational education of less than college level in agriculture education, distributive education, homemaking education, and trade and industrial education—including the administration, supervision, and the training of teachers of these programs. It seeks to focus attention on the educational practices and principles that have an important effect on the successful operation of these programs, and should, therefore, be helpful in evaluating and improving present programs.

The book is designed for educators and laymen who have responsibility for or interest in the training of teachers and in the administration and teaching of vocational and practical arts education. It should prove useful as a text for courses such as those concerned with the history, development, and administration of the programs described, and also as a source of information to administrative personnel and teachers of vocational education. Written primarily to provide factual information and general principles concerned with the several services or fields of study in vocational and practical arts education, the book does not contain detailed and specialized information about any one of the services or fields. It includes sufficient information to enable the reader to understand the important characteristics of the vocational area and their relationships to other areas or divisions of vocational and practical arts education.

SCHEER, G. F., and H. F. RANKIN. *Rebels and Redcoats*. Cleveland 2: World Publishing Company. 1957. 574 pp. \$7.50. Here is the American Revolution, the epic struggle that brought forth a new nation, told in a great measure by those who fought and lived in it—coming to life again in the actual words of its fighting men, its clay-pipe politicians, its foreign mercenaries, its determined redcoats, and its civilian men and women. From Lexington Green and Concord Bridge to the last great siege at Yorktown, the parade of both famous and little-known participants and eyewitnesses tells a connected narrative of the War for Independence. For a large part of this book was written nearly two centuries ago; the modern authors simply outline and narrate the "bridges" which cover the events of the years 1775-1782. The big story is taken directly from letters, diaries, reports, and recollections.

Not that the story is confined to the accounts of unknowns: Paul Revere tells of his ride here; Washington writes to his wife on accepting his command; several British officers of rank are quoted, and a number of Washington's reports are used. Here too are the words of John Adams, John Hancock, Nathanael Greene, Benjamin Franklin, Thomas Paine. The war in both North and South is represented, and the reader will find here some southern accounts which have been overlooked entirely by historians.

School for Tomorrow. New York: The American School Publishing Corp., 470 Fourth Ave. 1957. 16 pp. An architect's view of what future school housing may look like. Reprinted from the February 1957 issue of the *School Executive*. Also available from the same source are: "Domes for Schools" by E. F. Nye (4 pages), and "Educational Planning for an Ageless High School" by G. B. Wadzeck (6 pages).

SHAFTER, TOBY. *Edna St. Vincent Millay*. New York 18: Julian Messner, Inc. 1957. 192 pp. \$2.95. Red-headed, green-eyed Vincent (as she called herself) grew upon the Maine seacoast in an old house that lacked physical comforts, but inside there was the warmth of family love and irrepressible gaiety. Because her mother was often away on nursing cases, Vincent was head of a happy-go-lucky household, looking after her two younger sisters when she wasn't daydreaming herself. An unusually gifted child, she longed to be a concert pianist or a dramatic actress or maybe a poet, though she took her writing skill rather for granted. Alone in the woods, she felt the slow tides of her talent thrusting her toward her destiny. The sea and the mountains beat rhythms in her mind, and the change of seasons seemed almost unbearably beautiful.

Vincent's emotions spilled out in verse; she was a regular contributor to *St. Nicholas*, and at fourteen she had the thrill of having a poem printed in a national magazine. She went on to win the Intercollegiate Poetry Society prize, and in her last year at Vassar her first volume of poems was published. She flashed like a meteor across the cultural and intellectual life of New York, acting with the Provincetown Players, giving dramatic readings of her poems, writing and selling to all the important magazines.

The year 1923 was memorable—she was awarded the Pulitzer Prize and she married handsome, wealthy Eugene Boissevain. With him she traveled around the world soaking up impressions and ideas that she later wove into her poems and sonnets. Tiring of the hectic pace in New York, they purchased a farm in the Berkshires and here Miss Millay found real contentment. Her poetry gained in stature as her social conscience developed.

SHAPIRO, M. J. *The Sal Maglie Story*. New York 18: Julian Messner. 1957. 192 pp. \$2.95. When the 1956 baseball season opened, Sal Maglie was considered washed up as a pitcher—a 39-year-old has-been. Later in the season he was given the opportunity to help the Dodgers when they desperately needed pitching, and by the end of the World Series Maglie was recognized as one of the great hurlers in baseball. That this happened is considered a miracle; how it happened is an inspiration to everyone who reads his story.

SMITH, B. O.; W. O. STANLEY; and J. H. SHORES. *Fundamentals of Curriculum Development*. Yonkers-on-Hudson: World Book Company. 1957. 703 pp. \$5.75. In light of the amazingly rapid and far-reaching social changes that are taking place in America, teachers and administrators recognize the need for corresponding changes in the school curriculum. Indeed, there are very few problems that are receiving as much attention in schools throughout the country as those relating to curriculum re-organization and development. For persons concerned with curriculum planning, this revised edition should be of very real interest. It is a comprehensive treatment of the sociological and philosophical foundations, thereby providing a broad context for determining educational direction. A detailed discussion of the inter-personal relations involved in effecting curricular changes also enhances the book's value.

While theories of curriculum development have changed little since the earlier volume appeared, a considerable number of new programs have emerged and new materials have been developed during this time. Wherever these programs and materials better illustrate the principles and patterns discussed, the authors have either added or substituted them for the older material. Placement of the theoretical discussion of the curriculum has been changed so that the student meets concrete examples of materials and curriculum techniques early in the text. The authors state that the beginning student will be better able to deal with the theoretical issues after he has become familiar with actual programs and practices. On the other hand, they state that the more advanced student may turn at the outset to the theoretical treatment in order to gain a more fundamental understanding of the psychological and philosophical issues involved in curriculum planning.

The Status of the American Public-School Teacher. Washington 6, D. C.: Research Division, National Education Association, 1201 Sixteenth St., N.W. 1957. (February). 64 pp. 50¢. This is a comprehensive survey of the professional, economic, and social life of the American teacher. Complete tabulations show, among other things, that teachers are heavy voters, that most women as well as men teachers are married, that most are well qualified professionally, and that 72 per cent of all male teachers supplement their earnings.

The survey confirms in detail certain impressions as to handicaps under which the profession now works. However, it also gives a heartening picture of how far the profession has come in the hundred years since the NEA was organized. Here is a realistic composite picture of the nation's 1,100,000 classroom teachers.

STOKLEY, JAMES. *The New World of the Atom*. New York 3: Ives Washburn, 55 Fifth Ave. 1957. 304 pp. \$5.50. Here is the story of man's harnessing of atomic energy, its uses in war and peace, present developments throughout the world, and what lies ahead—a comprehensive book written for the inquiring layman by an author known for his reliability in reporting on scientific subjects. The book is designed to bridge a gap in available material on atomic energy, which ranges from elementary surveys of peacetime uses of atom's energy to the detailed, technical proceedings of the 1955 Geneva

Conference. The book contains the basic information on the nature of the atom, how atomic energy is released, how it is harnessed, and a survey of its many fascinating present and future uses. Such subjects as atomic fuels, heterogeneous and homogeneous reactors, the biological and industrial uses of radioisotopes, atomic energy and agriculture, the atomic furnace, and atomic power abroad are covered by the author. The book provides answers to questions the informed layman is asking about the new world the availability of atomic energy is making.

Studies in Education, 1956. Bloomington: Indiana University Bookstore. 1956. 386 pp. \$1. Paper cover. This is an annual abstract of doctoral theses of all individuals who received their Doctor of Education degree (and of some who received their Doctor of Philosophy degree with a major in education) at Indiana University during the year 1956. The abstracts are arranged alphabetically by the name of the person writing the thesis. It includes theses relating to the high school in guidance, ability grouping, character instruction, financing school buildings, teaching of reading, criteria for the evaluation of local programs of trade and industrial education, and follow-up study of beginning secondary-school teachers.

SULLIVAN, WALTER. *Quest for a Continent.* New York 36: McGraw-Hill. 1957. 389 pp. \$5.50. Antarctica is the earth's seventh continent almost as large as Europe and Australia combined, whose mysteries have intrigued explorers, scientists, and adventurers for three centuries. The author, a distinguished *New York Times* correspondent, presents a gripping picture of this little-known world. From his own observations on three expeditions, he tells of the ceaseless winds that mold the ice into strange shapes, winds so relentless that spiders spin no webs and flies are wingless. He describes vividly the eeriness of this unearthly region, the massive glacial rivers flowing into a sea so cold that a man without waterproof clothing will die in fifteen minutes, the volcanoes thrusting through ice caps, mountains that may be higher than the Alps, and valleys free of snow and ice within a few hundred miles of the South Pole.

This book covers the history of Antarctic exploration from early eighteenth century expeditions up to recent preparations for the International Geophysical Year 1957-58. Fascinating accounts are given of the heroic pioneers who risked, and often lost, their lives braving the dangers of the unknown. The hardy courage of men like Scott, Shackleton, Wilkes, and Ross is illustrated in the absorbing recital of their adventures, and the famous race of Amundsen and Scott for the Pole cannot fail to be an exciting experience for the reader.

SUMMERS, J. L. *The Wonderful Time.* Philadelphia 7: Westminster Press. 1957. 192 pp. \$2.75. After his discharge from the Army, nineteen-year-old Larry Richmond returns to high school to pick up where he left off. He finds himself in the junior class surrounded by sixteen-year-olds. There are distractions, however, to keep his mind from this strange predicament. Pretty Judy Parker, young blond member of the dramatics class, catches his attention and leads him on a merry chase. He has to call on all his past experience to wangle a date with her. Furthermore, Larry has to cope with rival Frank Hoffman, who openly resents his intrusion and never gives up the fight.

High-school life is exciting and lighthearted, but there are times when Larry doesn't feel quite part of it. The brand of fun seems strange to him and, when he airs his views to Judy, she giggles at his seriousness. Suddenly everything goes haywire and Larry gets into a series of predicaments—with Judy, rival Frank, Mr. Reno, the dramatics teacher, and Betty Armitage, a

former classmate of his now attending Junior College—before he realizes that he must face reality.

"Too old" for high school and yet unwilling to stop reliving the past, Larry tries to ignore the fact that his age makes him different from the other students. He finds it difficult to accept responsibility for himself and make definite plans for his further education, but, when he does, he is able to face the future with greater assurance and maturity.

THOMAS, JOHN. *Leonardo Da Vinci*. New York 10: Criterion Books, 257 Fourth Ave. 1957. 191 pp. \$3. "If Leonardo Da Vinci lived today," writes the author, "he would probably be the most prominent citizen in the world." For Leonardo would be honored as a painter of superb quality, a designer of the most revolutionary types of aircraft, a military strategist of extreme skill, an architect of many of the great buildings of the age, and an inventor of fantastic machines and industrial techniques.

From his apprenticeship in Florence during the reign of the tempestuous Lorenzo De' Medici, the author follows Leonardo to Milan, where his fabulous court pageants, his gigantic sculptures, his astounding mechanical inventions won him fame throughout Italy and France. We see Leonardo high on a scaffold, painting the famous *Last Supper* on a wall of wet plaster—and in his study, designing submarines, tanks, and flying machines for his patrons, the warring Italian dukes. We experience, too, the defeats and disillusionments of a genius so far ahead of his time that his discoveries, his feats of civil and industrial engineering were laughed at and forgotten until modern science rediscovered them.

TOYNBEE, A. J. *A Study of History*. New York 11: Oxford University Press. 1957. 428 pp. \$5. In this second volume, D. C. Somervell completes his abridgement of the author's great ten-volume work—an analysis of the rise and fall of civilizations, acknowledged as an achievement without parallel in modern scholarship. The first installment of the abridgement was a compress of Volumes I-VI of *A Study of History*; the present book deals similarly with Volumes VII-X.

Mr. Somervell began his undertaking as a labor of love and only later brought it to the notice of the author, whose approval was warmly supported, on publication of the first volume, both by reviewers and by the innumerable readers who made the abridgement a spectacular best-seller. Since that time the last four volumes of this book have been published, and now with the publication of the second abridgement volume we have an invaluable conspectus of the whole of the vast field covered by the author's original work, presenting the main substance of his argument in compact form.

This abridgement of Volumes VII-X starts with Part VI on Universal States and follows with Part VII, Universal Churches; Part VIII, Heroic Ages; Part IX, Contacts Between Civilizations in Space; Part X, Contacts Between Civilizations in Time; Part XI, Law and Freedom in History; Part XII, The Prospects of the Western Civilization; and Part XIII, Conclusion, with a chapter on "How This Book Came To Be Written" and a final Argument, which summarizes the course of all ten volumes of the original. The author says of this concluding summary, "in some ways, the deftest piece of Mr. Somervell's work."

TRUMBULL, ROBERT. *Nine Who Survived Hiroshima and Nagasaki*. New York 10: E. P. Dutton. 1957. 148 pp. \$2.95. The Japanese who survived the atomic bombings of both Nagasaki and Hiroshima are some of the most valuable people in the world. Now for the first time these men share the

knowledge they gained then at such terrible cost—a knowledge which is vital for all humanity. It is an incredible and pitiful story by human beings who, up to now, have been only a statistic in the Atomic Bomb Casualty Commission's records—an inexpressibly moving tale of personal suffering and stoicism in the face of disaster.

The men are from all walks of life—from the publisher of a leading Nagasaki newspaper to a dockyard laborer. Like the 255,000 other inhabitants of Hiroshima, they were utterly unprepared for the Bomb. Eight of the nine accidentally or deliberately took cover in the few seconds which elapsed between the unearthly flash of light and the blast, which, in Hiroshima, wiped out about 64,000 citizens at a stroke and burned and maimed 72,000 more. The ninth was caught enroute between his home and his plant. When they struggled to their feet and looked about them, the city they knew had vanished. In its place was a wasteland of flattened buildings and blackened earth lit by myriads of tiny flames and peopled with bodies so horribly burned they were almost unrecognizable as human beings.

In the three days that followed each man for some reason made his way to Nagasaki by train—of them all, the most pitiful, perhaps, was the young bridegroom who took the journey in order to return the charred bones of his young bride to her family. They were the first survivors of the Hiroshima holocaust Nagasaki had seen. As they were describing their horrible experience, they saw the unearthly flash of light a second time. "There, you see it: That's what I mean!" each one cried as he forced all those with him to take cover.

VANCE, MARGUERITE. *Secret for a Star*. New York 10: E. P. Dutton. 1957. 249 pp. \$2.75. The author tells a warm, touching story of a girl's recognition of her own responsibility in controlling her weight, gaining her grandmother's affection without compromising her own principles, and, through self-denial and discipline, achieving and holding the goal she has set herself. When a tragic accident, which took the lives of her adored parents, forces Prudence Trudhue from the tender security she has always known into the stiff hostility of her grandmother's house in New England, this sensitive, lonely, unattractive fourteen-year-old is ill-prepared to meet the strange situation. As she tries to adjust to a life devoid of family affection and completely alien to her previous experience, Prudence's true character and personality gradually overcome the seemingly insurmountable difficulties.

WALDEN, A. E. *Palomino Girl*. Philadelphia 7: Westminster Press. 1957. 176 pp. \$2.75. This is the story of Kit Kendall's "year of decision." As she leaves the Star K Ranch to return to college, her brother's warning rings in her ears: "Kit, you're bossy . . . If I were you, Kit, I'd try to do something for myself this year. I'd try to find myself a man." Otherwise, he warns, she will become a bossy old maid with her entire life devoted to running the ranch. (Kit has already managed the family ranch in the Black Hills of South Dakota for several summers, relieving her aging father of the job.) As she returns to Rutledge College for her senior year, Kit realizes that there is truth in Cameron's words, but she will have to find a man who is stronger than she is.

WARRINER, J. E., and FRANCIS GRIFFITH. *English Grammar and Composition*. New York 17: Harcourt, Brace and Company. 1957. 704 pp. This book, a complete handbook in itself, is the summary volume of a new six-book series. It reviews materials covered in the preceding books of the series and presents advanced subject matter to meet the special needs of students about to enter college or to take their place in the world beyond school.

Part One is a grammar review designed to help the student fill gaps in his grammar preparation before undertaking the work on sentence structure to which Parts Two, Three, and Four are devoted. Throughout the book traditional grammar is employed wherever it will aid teaching and learning. The attitude of the book toward correctness in current usage is explained in the section "What Is Good English?" The fourteen chapters on the writing of correct, clear, and smooth sentences represent a major emphasis of the book. Part Five teaches the use of library tools, and includes detailed study of the dictionary and other reference books.

The seven chapters of Part Six, "Writing Compositions," give complete and specific instruction on the planning and writing of exposition, including chapters on clear thinking, the research paper, and letter writing. The chapter on narrative writing is a break in the otherwise purely expository nature of the writing taught in this book.

Part Seven, "Speaking and Listening," presents important skills in these related subjects. The author's concise and lucid treatment of these areas provides a complete description of techniques and an abundance of practical exercises.

Part Eight covers in detail and with a great many exercises the essentials of English mechanics: capital letters, punctuation, manuscript form, and spelling. The section, "College Entrance and Other Examinations," is planned to acquaint the student with the kinds of tests that he is likely to encounter in advanced work in English.

Although primarily a teaching instrument, this handbook has been designed for use as a reference tool. The handbook arrangement, now presented with the additional advantage of color, and the exceptionally complete index make the book a handy reference in which the student can easily find the answer to almost any language problem he is likely to encounter. The book is entirely flexible, imposing no chronology. Each chapter is a distinct unit and may be taught at any point in the course.

WEYMAR, PAUL. *Adenauer, His Authorized Biography*. New York 10: E. P. Dutton. 1957. 509 pp. \$5.95. Konrad Adenauer, Chancellor of the Federal Republic of Germany, is a man about whom much is known but little understood. This biography, which has had his fullest cooperation, reveals him as he is—a man to match with the great Churchill himself. It is the full and inspiring story of a man whose strong character, capacity for hard work, acute understanding of the complexities of politics, and unshakeable faith in himself, his fellowmen and God have sustained him through terrible trials to the great triumphs of his later years.

The author has consulted friends, family, and both political adherents and opponents for firsthand accounts of every aspect of this unusual man's career. Adenauer himself contributed stories of his boyhood, when under his father's tutelage, he first became a passionate gardener, and when, in his struggles to pass exams, he often put his feet in a pan of icy water to keep himself awake while he studied. The account of his refusal to fly the Nazi flag on the municipal buildings of Cologne (a stand which lead to his dismissal as Chief Mayor) is a highly dramatic one, as is the story of the years that followed, when the Nazis hunted and harried him. They even arrested his wife and by threatening their children, finally forced her to reveal his hiding place.

Never a man to court popularity for its own sake, Adenauer, now 81, has achieved his position by an almost superhuman capacity for work, a great

knowledge of people, and, above all, a strong democratic belief, based on Christian principles, in the importance of the individual.

Only a man of extraordinary powers could have mobilized the forces of reason in defeated Germany and led his country back successfully to its present respected position in the European family of nations. He has proved himself a firm friend of the United States, a passionate adherent of the idea of a united European Community, and a wise and wily statesman in his dealings with Russia (he has not been called the "Old Fox" for nothing).

WHYTE, W. H., Jr. *The Organization Man*. New York 20: Simon and Schuster. 1956. 439 pp. \$5. Who is the organization man? He is the middle-class American who has left home, spiritually as well as physically, to take the vows of organization life. He can be found in corporations, in laboratories, in law factories, in foundations, in the hierarchies of our churches. He not only works for The Organization; he also belongs to it. And it is he who sets the temper of America.

The organization man, the author believes, is at the center of a deep conflict in American values. The old precepts of the Protestant Ethic, to which he still gives lip service, simply do not jibe with the kind of group life he has to live. Intellectually, it is not the defects of organization life that cloud decision for him *but its very beneficence*. To resolve his doubts, he is constructing a new faith—a Social Ethic that would make morally legitimate the increasing power of society over him.

This book follows the organization man from his pre-induction training in school and college to his further molding in The Organization itself. It describes the new standards of what is good and bad as these are defined in the popular fiction he reads and in the personality tests he takes (in an appendix is the first primer on how to cheat a good score). It follows him to the new suburbia, the packaged villages he finds so natural a habitat, and examines there his social life, his religion, and the schools in which his children are being taught to grow up, in their turn, as organization men.

WIGGINS, S. P. *The Student Teacher in Action*. Boston 8: Allyn and Bacon. 1957. 229 pp. \$2.95. This book has been written to help guide the student teacher in thinking, observing, planning, helping, and creating. Through the use of examples and case studies on various grade and age levels, future teachers learn the common elements of good student teaching. The aim of the book is to help the student teacher to see quickly total responsibilities and to aid in discovering courses of action in meeting those responsibilities adequately. Methods and techniques of teaching are discussed in so far as they complement that aim. The book goes beyond the scope of the usual handbook in student teaching, but avoids the weighty comprehensive treatments common to conventional student teaching texts. A selected list of readings is included with each chapter of the book.

WINWAR, FRANCES. *Elizabeth*. Cleveland 2: World Publishing Company. 1957. 251 pp. \$3. The love story of Elizabeth Barrett and Robert Browning is one of the most beautiful in the world. It could have no happier narrator than the author, whose adult books have won her acclaim as "one of the truly great biographers of our time" and whose acknowledged scholarship has led her to much new material including Elizabeth Barrett's poem "Song," which is published here for the first time.

From the beginning, Elizabeth was her father's favorite. Edward Barrett Moulton Barrett, raised on a slaveholding plantation in Jamaica, and Victorian

to the soles of his boots, looked upon all of his children as his personal property, but he adored his first-born child. When, at the age of six, Ba presented him with a poem on the subject of Virtue, he proudly appointed her Poet Laureate of Hope End. Then suddenly a fall from her pony ended the impulsive child's carefree days in the out-of-doors; brilliant, rebellious Ba became a semi-invalid, confined to her tower room, like a singing bird in its cage.

Other misfortunes followed in quick succession. Mrs. Barrett died and Elizabeth's father, now more dependent than ever on his children, was forced to sell Hope End. The family finally settled in London at 50 Wimpole Street, but the young poet's delight was immediately stifled by the tragic death of her favorite brother, Bro. Completely confined by ill health and her father's possessiveness, Ba gave up all thought of personal happiness in marriage and devoted herself to her writing. And then one night in January 1845, Elizabeth Barrett received a letter in an unfamiliar hand—and thus began one of the greatest love stories of all time.

The World's Great Religions. New York 20: Simon and Schuster. 1957. 318 pp. (10½" x 14"). \$13.50. This book by the editors of *Life* magazine includes additional material (160 pages) to that which appeared in the magazine. Here, in beautiful photography and art reproduction, with 190 pages of full color and more than 175,000 words, is a sweeping panorama of mankind's spiritual heritage. This book was prepared with the help of many religious authorities throughout the world. Almost half of the book is devoted to Christianity, the largest and most widely spread religion on earth. Also included are Judaism, Hinduism, Buddhism, Toosin, Confusianism, and Islam. The study of Judaism covers its origins and traditions, and provides an intimate view of the way Jews the world over approach their God.

The Christianity section includes the life of Christ as interpreted by great artists, an account of the Bible, the Holy Land as shown in a specially created fold-out map and striking color photographs, the history of Christianity, the Sistine Chapel frescoes of Michelangelo as the greatest religious art ever produced. The many aspects of Christian worship include the story of the sacraments as they are practiced now, have been, and will be for future generations. The whole section contains a treasury of paintings, photographs, and essays that document the basic teachings, tenets, and development of Christianity.

YOUNG, ESTELLE. *Gone to Europe.* New York 16: Richard R. Smith, Publisher, 120 East 39th Street. 1952. 251 pp. \$3. For all armchair travelers who dream about going to Europe but never seem to get there; for those who have made the trip and want to relive it—this book was expressly written. Here is a light but satisfying account of a first trip abroad by an author who knew how to get the most out of her journey. She takes the reader aboard the *Queen Elizabeth* in New York, lands him at Cherbourg, and leads him on a fascinating excursion through France, Italy, Switzerland, Germany, and England. Her observation of the famous sights of these countries is much more than cursory. She takes a genuine, active interest in everything she sees—the art, architecture and crafts, the cities, and the European countryside—and she places stress on their importance and their contribution to the life of the people today.

News Notes

THE NEA CENTENNIAL SONG BOOK

This book opens with the short version of Dr. Hanson's Centennial Composition—our contribution to the *future* heritage of America's music. The booklet includes a wide selection of "singable" songs America has sung in the century just past. We think you will find this a usable article for your conference banquets, workshops, and the like. The price is 15 cents per copy with regular NEA discount for quantity orders. Orders should be sent to the NEA, 1201 Sixteenth St., N.W., Washington 25, D. C.

U. S. NATIONAL COMMISSION FOR UNESCO MEETS IN SAN FRANCISCO

The U.S. National Commission for the UN Educational, Scientific, and Cultural Organization (UNESCO) will convene its Sixth National Conference in San Francisco, November 6. This Commission for UNESCO is required by law to hold a national conference every two years. Upwards of 1,000 people from Asia and the United States will assemble in the Golden Gate city for three days through November 9 to study means toward improved understanding and co-operation between Asia and the West. Delegates will be drawn from the 48 states. Observers representing various Asian nations will also participate in the meetings.

In announcing the site and focus of its sixth biennial conference, the National Commission has thus directed attention to an area where barriers to understanding appear more persistent than in other regions of the world. At the head of the host city's sponsoring committee is Jermiah F. Sullivan, Jr., prominent executive and civic leader. Mr. Sullivan's committee will plan accommodations for Commission members and conference delegates. The 100-member National Commission—representing national voluntary organizations and Federal, local, and state governments—serves to advise the United States on UNESCO affairs relating to its policies. Chairman of the Commission is Dr. John R. Richards, Chancellor of the Oregon State Board of Higher Education.

The Commission's efforts have simultaneously given rise to the planned observation by nation-wide community organizations of "Asian Month." An *ad hoc* group composed of UNESCO Relations staff members and representatives of seven co-operating non-governmental agencies as well as representatives from the Library of Congress met on March 4 to discuss the feasibility of planning a nation-wide program of organizational and community activities dealing with Asia and Asian-American relations, designed to stimulate Asian-American understanding and co-operation. Community projects would be carried out prior to or during the Sixth National Conference and would bring to a wider audience the efforts to be made at the Conference to stimulate citizen interest in Asia. These groups have set November aside for the initiation of local programs designed to stimulate fellow citizens in Asian-American appreciation.

It is planned that a book list of approximately 200 books, divided between adult and juvenile reading material and each with a sentence description as well as a list of motion pictures, slides, and records would be prepared and made available for use by those groups planning to develop programs during

November. A list of museums in the United States which have Asian art collections, along with information concerning active museum participation in the celebration, will be prepared. The UNESCO Relations staff will compile a listing of cultural groups or Asian personalities such as musical, theatrical, ballet and dance groups, or lecturers, *etc.*, who might be available during the period 1957-58. This list would also contain the name and address of organizations knowledgeable in this area who may be directly solicited for aid of this sort (Asia Foundation, various booking agencies, impresarios, International Education Exchange Service, International Institute of Education, *etc.*).

"Asian Month" activity will be primarily geared to community participation highlighted by music, films, lectures, cultural exhibits, and book displays featuring Asia. Libraries, schools, and museums are co-operating in the compilation of a concise bibliography that will be made available to interested groups.

A SIMULATED SECURITY COUNCIL MEETING

Nearly 100 students from 15 New York City high schools gathered at Pace College on Saturday, February 16, to participate in the city's first Model Security Council meeting of high-school students. Each high-school "delegation" assumed the role of a different nation and represented that country's point of view at the model Council sessions designed to foster the principles and ideals of the United Nations among young Americans. William Jordan, Assistant Director of Political and Security Council Affairs at the United Nations, presented a luncheon address on "The U. N. in World Affairs."

The simulated Council meeting was sponsored by Pace College's International Relations Club as part of a series of commemorative events celebrating the College's 50th anniversary year. Among the New York City high schools represented at the College were Seward Park, Stuyvesant, and George Washington high schools in Manhattan; Samuel J. Tilden, Lafayette, Franklin K. Lane, Erasmus Hall, Fort Hamilton, and Eastern District high schools in Brooklyn; Bayside, Forest Hills, Martin Van Buren, and Jamaica high schools in Queens; and the Bronx High School of Science and James Monroe High School in the Bronx.

INSTITUTE FOR SCIENCE TEACHERS

The University of Oklahoma, Norman, Oklahoma, is sponsoring an eight-week seminar-conference summer session from June 3 to July 27 on the graduate level. Dr. H. H. Bliss is director of this summer session which is designed to improve the understanding of secondary-school teachers in the biological and physical sciences, in the interrelationships of the several sciences as focused on selected topics, in the common features of the techniques in the scientific method, and in the grasp of fundamental concepts with emphasis on the developmental aspects.

Teachers who have taught general science within the past three years or who are scheduled to teach it next year are eligible. Applications from teachers having substantial experience teaching biology, chemistry, physics, or mathematics will be given favorable consideration. There will be no restrictions on admission for reasons of race, color, creed, sex, or age. A maximum of eight semester hours of credit can be earned in one to three hours each in chemistry, history, physics, plant sciences, and zoology. The level of work is undergraduate and graduate. The National Science Foundation has provided funds permitting a limited number of persons to be accepted in the Institute free.

Recreational activities under University management include golf, tennis, volleyball, softball, swimming. There will be a series of classical films, visiting artists, and public lecturers at low admission charges. Most major churches maintain regular services and student centers. Members of the Institute will form a committee to handle special social, recreational, and auxiliary educational activities.

MILITARY GUIDANCE FOR THE SECONDARY-SCHOOL

The Reserve Forces Act of 1955, which clearly made it mandatory for almost all boys of high-school age to serve, at one time or another, in the nation's armed forces, also spotlighted a problem which had been bothering the services for some time: "Was the average high-school boy getting the type and extent of information concerning service life that he needed in order to make a wise and logical choice when he undertook to fulfill his military obligation?" A survey showed the answer to be negative in a majority of cases. Therefore, with the co-operation of the other services and the approbation of the National Education Association, the U. S. Navy, on behalf of the Department of Defense, endeavored to alleviate the situation by establishing the *High School News Service* at Great Lakes, Illinois.

Preliminary evaluation studies made during the early stages of its program indicates that the *High School News Service* is a worthy undertaking and could solve, at least in most cases, the need for specific armed forces information in high schools.

The program, which is being conducted during the first year (school year 1956-57) on a trial or pilot basis, has one primary mission—to disseminate unbiased and factual news of all services to high-school students, particularly those in the senior classes. Officials stress that it is *not* a recruiting program. Approximately 400 secondary schools, both private and public, comprised the control group during the first year. Located primarily in 16 cities, the pilot schools represent a selective cross section of the nation's high schools.

Each branch of the armed forces, including the Coast Guard, and other interested government agencies such as the Veterans Administration and Selective Service, have established liaison offices which are responsible for supplying news, information, *etc.*, required by the *High School News*.

Two publications, a 24-page magazine (*High School News Service REPORT*) and a single page (17" x 22") clipsheet (*High School News Service CLIP-SHEET*) are distributed once each month to participating schools. A basic format is employed in the REPORT in which service life, as much as possible, is presented in terms of subjects common to all services. In addition, each service and participating government agency has been or will be featured in a separate article. The REPORT is intended primarily for use in libraries, classroom discussions, and by counselors. The CLIPSHEET carries less specific information—more of a general interest type—and is designed to be posted on bulletin boards or used by school newspapers.

All schools have been given blanket permission to reproduce any or all of the information disseminated by the *High School News Service*. Now, well past the midway point of the trial program, the *High School News Service* has presented in the *Report* more than 20 articles dealing with the armed forces, and at least 12 more will be covered in future editions this school term.

Starting with the school year, 1957-58, a new source of free authoritative military guidance information will be available to all secondary schools. This information will be presented, by the *High School News Service*, in these two

monthly publications: *The High School News Service REPORT* and *The High School News Service CLIPSHEET*. If a high-school principal or guidance counselor desires to be placed on the High School News Service mailing list next school year (1957-58), write to: Director, High School News Service, Building 3109, Great Lakes, Illinois.

STUDENTS VISIT ATOMIC ENERGY INSTALLATIONS

About 4,000 high-school students, most of whom are enrolled in science courses, accompanied by their teachers visited major Atomic Energy Commission laboratories and production facilities on February 11, marking the 110th Anniversary of the birth of Thomas Alva Edison.

Eight of the Commission's key laboratories and production centers admitted the students to unclassified areas for the purpose of stimulating their interest in careers as engineers and scientists, and of affording them an opportunity to see for themselves the research and development work in the national program to advance civilian uses of the atom.

Chairman Lewis L. Strauss of the Atomic Energy Commission has noted that: "Large numbers of our high-school students have no opportunity to discover whether science and engineering appeals to them. The extent to which science has become a major factor in our living, in our environment, and our fate is something now apparent to all who will examine the facts. Our position of eminence and influence in the world has been largely due to the prudent and vigorous applications of technology to the development of our resources and our industrial potential. It has been built on an educational system conducted by independent communities and, until recently, healthily concerned with the cultivation of the natural sciences and mathematics along with the humanities. I hope that the students and teachers who see the work being done in the Commission's facilities toward unlocking the atom for peaceful uses will have a deeper appreciation for the contribution a scientific or engineering career can make to humankind."

The students who visited Commission laboratories received explanations of the major research and development work and saw exhibits and models, some of which they were able to work themselves. Selection of the students was made by the local school systems. Visits were as follows:

Sandia Laboratory, Albuquerque, New Mexico, operated by Sandia Corporation: 100 outstanding science students and their teachers from the Albuquerque High School.

Los Alamos Scientific Laboratory, Los Alamos, New Mexico, operated by the University of California: 800 students from Los Alamos and nearby communities.

Hanford Operations, Richland, Washington, operated by the General Electric Company: 675 science students from 11 school districts in the Hanford area.

National Reactor Testing Station, Idaho, operated by the Phillips Petroleum Company: 950 chemistry and physics students from 14 high schools in the Idaho Falls area.

Brookhaven National Laboratory, Upton, New York, operated by Associated Universities, Inc.: 200 science students from junior and senior high schools in Suffolk County, Long Island, New York.

Oak Ridge National Laboratory, Oak Ridge, Tennessee, operated by Union Carbide Nuclear Company: 1,100 science students from 78 high schools in the Oak Ridge area.

Savannah River Plant, Aiken, South Carolina, operated by E. I. du Pont de Nemours and Company: 75 science students from Aiken, Barnwell, and Allendale Counties, South Carolina, and Richmond County, Georgia.

Knolls Atomic Power Laboratory, Schenectady, New York, operated by General Electric Company: 36 top science students selected from 18 high schools in the area.

THE CHALLENGE OF POLIO

The result of Salk vaccination programs to January of 1957 show that 11 million persons have received *only* one shot; 25 million have received two shots; and 9 million have received three shots. In considering what has been accomplished, we must remember that complete vaccination consists of *three* injections—the second, two to six weeks after the first; and the third, no less than seven months after the second. Persons who have had only one shot are not fully protected against paralysis. Two shots provide substantial protection, at least for one polio season. But three are necessary for maximum and long-lasting protection. From the figures available, it is clear that we have a long way to go to reach the vaccination levels believed necessary to end paralytic polio as an epidemic disease. Of the 45,000,000 persons who have received vaccine, it is estimated that 40,000,000 were under the age of 20. Most of them were under 10 years of age or expectant mothers.

Hardly any headway has been made in vaccinating young adults. The number of people in this age group who have received three shots is so small that no reliable figure is available. Also lagging are vaccinations in the pre-school age group. This group is of great importance. The U. S. Public Health Service in a preliminary study estimates that 30 per cent of all cases of paralytic polio in 1956 were among youngsters below five. The manner in which vaccine programs are set up has been found to make a difference in the number vaccinated. For example, the number of reported polio cases has dropped from 35,592 in 1953 to 15,400 cases in 1956.

AN INTERIM REPORT ON SCHOOL CONSTRUCTION BILLS

The fate of the school construction measure lies for the moment in the hands of seven people—four Democrats and three Republicans. These make up the House Subcommittee on Education charged with drafting a bill for consideration by the House of Representatives.

The group of seven is headed by Rep. Cleveland Bailey (D., W. Va.). For the past 30 days this group has been hearing witnesses both for and against the measure. Among those who have urged the subcommittee to bring out a bill has been Secretary of Health, Education, and Welfare, Marion B. Folsom, who presented his argument with warmth and plenty of figures. He was followed soon after by NEA's representative, former U. S. Commissioner of Education, Earl J. McGrath, who told the subcommittee it is time to stop the "numbers game" and to enact a bill for school construction. Representatives from organized labor, the National Congress of Parents and Teachers, and the Chief State School Officers were among other supporting witnesses.

The came the opposition—led by the U. S. Chamber of Commerce. Representatives of school boards and some taxpayers groups presented their usual arguments to the Bailey subcommittee, insisting this is not the time to enact a Federal aid measure.

The Bailey subcommittee took testimony on the entire question of Federal school construction aid, rather than on any one measure. Actually, there are some twenty-one bills in the House (and six in the Senate). They represent the points of view of the Democrats, and of the Republicans. Some favor flat grants; others lean more toward equalization grants. If there is any single bill which can serve as a compromise, it is Rep. Joe Holt's measure, H.R. 4656.

The Bailey subcommittee went into executive session (about the end of March) and wrote its own draft. The outlook is (and this is speculation) that a measure will be reported some time in April by a 4 to 3 vote; possibly by a 6 to 1 vote. After that, the progress of the measure will depend on the generalship of Rep. Barden, chairman of the full House committee on education, and on the active support of President Eisenhower.

SCHOLARSHIPS

Today thousands of individuals are interested in scholarships. A very minimum of 100,000 talented youth each year are unable to continue their education beyond high school because of financial reason—this despite the fact that more than \$60 million were awarded in scholarships last year. Each week new scholarships are being established all over the United States. It is essential that each high school, college, university, and vocational training school be cognizant of and alerted to the tremendous amount of new funds that are available. Donors too—fraternal organizations, industry, philanthropic funds, and foundations—have to be aware of what is going on in this area.

To assist in filling this need, the Bellman Publishing Company, Cambridge 38, Massachusetts, has, during the past years, been assembling information about scholarships, fellowships, and loans. They are providing a special News Service in which they serve as a National Clearing House of information on student aid, research awards and grants for foundations, libraries, colleges, universities, guidance and financial counselors, public relations, industrial relations and personnel officers, and research workers. The company provides four issues of the *News Service* each year. Each year this quarterly News Service will list information on more than \$100 million of student aid awarded annually. Subscription price of this service is \$35 per year. New subscribers can secure Volume 1 (1955-56) at a special price of \$10. Available also from the same source are numerous monographs on various occupations; they cost \$1 or more each. Another source of reference which the company has is *Scholarships, Fellowships, and Loans* by S. N. Feingold, 3 volumes—Vol. 1, 254 pp. \$6; Vol. 2, 312 pp. \$5; and Vol. 3, 471 pp. \$10. For complete information about this service write to the Bellman Publishing Company, Cambridge 38, Massachusetts.

GUIDANCE FOR HIGH SCHOOL YOUTH

Russell J. Fornwalt, Vocational Counselor for the Big Brother Movement, 33 Union Square West, New York 3, New York, has for a number of years collected and published information, in mimeographed form, as an aid to guidance counselors. Three of his latest releases are: *Employment Guide* (January 1957, 5 pp., 10c); *Juvenile Delinquency Research Review* (January 1957, 7 pp., 20c); and *Summer Job Guide and Employment Information* (1957, 6 pp., 15c).

BUSINESS-EDUCATION DAY IN BOSTON

The Boston Public Schools and the greater Boston Chamber of Commerce cooperated last fall in the observance of the second Business-Education Day in Boston. A pilot program of this day was held in November 1955, when over 200 of the personnel of the Boston Public Schools took part in the first of such programs. This year over 5,000 teachers of the city were made welcome in over 150 business and industrial firms throughout Greater Boston. One of the purposes of such a day is to acquaint teachers with the basic elements of the

free enterprise system. Problems common to business and education were discussed and many interesting and valuable points of information were observed by the teachers. These teachers will thus be enabled to return to the schools richer for these experiences and observations.

SUMMER JOBS FOR TEACHERS

Thousands of summer jobs with unique opportunities for personal enrichment and for professional advancement are awaiting teachers this summer. These are counselors' or specialized assignments at camps operated by nearly 650 Girl Scout councils from coast to coast. Art, history, home ec—whatever the subject—teachers look forward to summer jobs in Girl Scouting to help them to refresh their energies and their outlook, and to achieve new understanding of girls as individuals.

Increasing emphasis on school camp programs in many states makes this opportunity particularly appealing to teachers as a contribution to professional advancement. Living, working, planning in an informal, cooperative atmosphere with girls 7 through 17 years old, contribute insights of lifelong value. At the same time, knowledge of the Girl Scout camping program, based upon the development of principles which have been adopted by many other organizations, strengthens the teacher's qualifications for participation in school-sponsored outdoor and camping programs.

Some familiarity with the out-of-doors is required for most Girl Scout camp jobs. Equally important are enthusiasm, patience, adaptability, and ease in working with girls on a partnership basis. Qualifications of age and experience vary with the specific assignments, but all demand a sympathy with the aims and philosophy of Girl Scouting and an interest in helping children of different backgrounds learn to enjoy living and working together in the out-of-doors.

Candidates for the job of camp director must be at least 25 years old and have had camping, administrative, and supervisory experience. In addition, they should be familiar with the Girl Scout program. Minimum age for a job as assistant director is 21; similar experience is required.

Other positions available to suitably qualified candidates at least 21 years old and the requirements for each are: unit leader (experience with children as teacher, leader, or counselor); waterfront director (a current water safety instructor's certificate); program consultant (experience in a specific field such as music, dramatics, nature, camp-craft); food supervisor with at least two years of experience in institutional management); health supervisor (a registered nurse with first-aid training); and business manager (business training plus typing and bookkeeping.) Assistant unit leaders and assistant waterfront directors with required experience may be as young as 18. And thousands of counselors, 18 and older, are needed to live and work with girls in their units.

Salaries vary according to experience, qualifications, and training. Depending on the length of the camping season and the location of the camp, incidentals such as laundry and travel expenses also may be covered. A basic precamp training session of about 5 days' duration is provided for all staff members.

Teachers interested in summer jobs at a Girl Scout camp near home should query their nearby Girl Scout council. For opportunities at a distance, write directly to Miss Fanchon Hamilton, Recruitment and Referral Adviser, Girl Scout National Headquarters, 155 East 44th Street, New York 17, New York.

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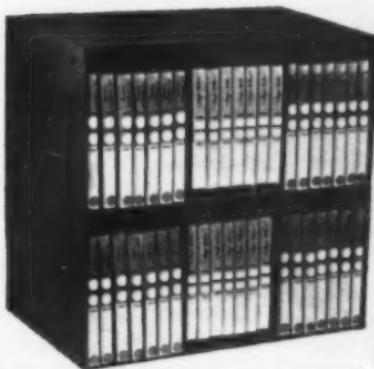
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The Tuition Plan, Inc., 10 East 40th St., New York 16, New York, a subsidiary of C.I.T. Financial Corporation, makes it possible for parents to pay school and college costs in monthly installments. The company, which began in 1938 with a handful of student "customers" at one eastern school, now finances thousands of student contracts throughout the nation. With the Tuition Plan, a parent can finance up to four years of college costs on one contract. On multiple-year contracts, in the event of the parent's death, remaining contract costs are automatically covered by life insurance to assure the completion of the student's education.

ARTICULATION BETWEEN HIGH SCHOOL AND COLLEGE

District 1 of the Alabama High School Principals Association developed its mid-winter meeting around the theme: "Closing the Gap Between the Secondary School and College—An Obligation to Youth." Following a general session, those attending then formed into three groups. Group I discussed "Bases for Admission to College; Group II "Common Understanding of Instructional Procedures at the High School and College Levels"; and Group III "What Procedures Seem Advantageous for Guidance of High School Students to College." A general session was then held at which time each group reported a general summary and recommended next steps were made. A complete report of the meeting was made and mailed to each member attending. The meeting was held at Alabama A and M College in Normal on January 19, 1957.

OCCUPATIONAL CHOICES OF GIRLS

Teaching is the third most popular occupation in the eyes of adolescent girls, according to a new nation-wide survey of the personal and social interests and aspirations of girls 11 through 18. Secretarial work is the prize plum, while nursing is a second and social work, fourth. This survey for the Girl Scouts of the U.S.A. revealed that 80 per cent of the adolescent girls want to grow up to be like their mothers, other women relatives, or teachers. Only two per cent long to become glamorous movie or TV stars. College education is desired by one third of the girls. The University of Michigan's Survey Research Center directed the study.

IMPROVING SCIENCE EDUCATION

The "Arlington Program," aimed at improving science education in Arlington, Virginia, and other parts of the Washington metropolitan area, has been adopted by the Advisory Board of Education, National Academy of Sciences-National Research Council. Local school systems and eight local colleges and universities cooperate for better preparation of science and mathematics teachers. Last summer about 60 teachers from Arlington and from Montgomery County in Maryland, bearing scholarships provided by their communities, enrolled in the science and mathematics programs in these colleges and universities. Many teachers from other local and more remote areas also studied some of the 75 courses—a broad spectrum of science and mathematics.

NATIONAL CONFERENCE ON EDUCATION FOR LEISURE

A national conference to study the responsibilities of the public school in education for worthy use of leisure time will be held in Washington, D. C., May 15-18. It will be co-sponsored by the American Association for Health, Physical Education, and Recreation (AAHPER) and several NEA head-

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quarters units, with a number of other national education and recreation organizations co-operating. Approximately 200 persons will be invited to attend. Special attention will be devoted to the problems of leadership, facilities and resources, community co-operation, and curriculum.

HAVE YOU READ?

The following articles are worth your while in reading: "Random Falls Idea: An Interim Appraisal," "The School Executive, pp. 92-103 February 1957; "Let's Talk Facts" by Walter C. Eells, pp. 41-46, March 1957, *The School Executive* (A reply to Bestor in which Dr. Eells relies on a full amount of facts without omissions, distortions, or aberrations.); A reply to Arthur Bestor by Walter D. Cocking, pp. 7-8, March 1957, *The School Executive* (Dr. Cocking says, "Americans will not buy it because the article is false"); "Let Your Students Attack the Litter Problem," by Jack D. Roberts, pp. 60-61, March 1957, *The School Executive*; "Teacher Recruitment Starts in the 8th Grade" by Claude W. Traylor, Jr., pp. 63-64, March 1957, *The School Executive*; and "TV or not TV" by Alexander J. Stoddard, pp. 65-75, March 1957, *The School Executive*.

THE INTERNATIONAL GEOPHYSICAL YEAR

This is no new idea. The first International Polar Year was held in 1882-83. The Second International Polar Year was held in 1932-33, nearly 50 years later. This third event, the International Geophysical Year, will be from July 1, 1957 to December 31, 1958.

The principal fields of study during the IGY will be aurora and airglow, cosmic rays, geomagnetism, glaciology, gravity, ionospheric physics, longitudes and latitudes, meteorology, oceanography, seismology, solar activity, and upper atmosphere studies using rocket and satellite vehicles. Inherently these fields are characterized by their global nature. The chemist or the physicist can perform experiments in his laboratory, establishing the conditions of his experiments. The laboratory of the geophysicist is the earth itself and the experiments are performed by nature; his task must be to observe these natural phenomena on a global basis if he is to secure solutions and to develop adequate theoretical explanations. This is one of the compelling reasons for the world-wide scope of the IGY in 1957-58; to observe geophysical phenomena and to secure data from all parts of the world; to conduct this effort on a coordinated basis by fields and in space and time so that the results secured not only by American observers, but also by participants of other nations, can be collated in a meaningful manner. Only through such an enterprise as the IGY can synoptic data be satisfactorily and economically acquired.

The proposal that 1957-58 be the time for this major international effort was based in part upon the fact that this period corresponds with a period of maximum solar activity. It is planned to take advantage of this expected increased activity by a series of Alerts and of Special World Intervals, called on occasions when it is predicted that unusual magnetic, ionospheric, or auroral activity will occur and on days of solar eclipses and unusual meteor showers. Special cooperative efforts on a world-wide scale will be made during these intervals to record the many phenomena which react so remarkably to the complex activities of the sun.

Each country has assumed the responsibility for the planning and the execution of its own program, within the broad general principles outlined by the GSAGI. The international IGY program thus is an expression not only

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of the scientific interests of the various countries but also of the scientific community of the world as a whole. It is interesting to note that, because of the very nature of the IGY, there are many examples of projects or experiments planned on a cooperative basis by scientists from two or more countries.

Plans are under way to provide means whereby the general public will be informed of the type and extent of the work being done. At present, a limited amount of information is available. To keep abreast of plans and activities write to the National Academy of Science—National Research Council, Washington, D. C.

SCHOLARSHIPS FOR PROSPECTIVE TEACHERS

A new scholarship aid program designed to assist prospective teachers, as well as teachers engaged in graduate study, has been announced for the School of Education at the University of Pennsylvania by Dr. Gaylord P. Harnwell, president of the University. Available to freshmen starting in 1957-58, the broadened aid program can be extended through all four years of teacher training. As many as 400 undergraduates will receive full or partial benefits annually when the program reaches maturity.

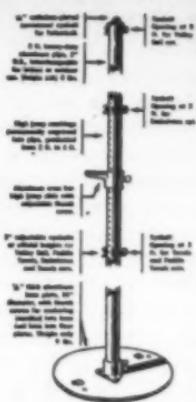
Dr. Harnwell reported that teachers on leave from their positions and graduate students preparing for teacher certification will also be able to secure scholarships of \$400 covering half of tuition costs in the School of Education. Part-time pupils in education will pay only \$20 per credit hour, instead of the standard rate of \$34 in other subjects.

The announcement follows closely a general tuition increase from \$800 to \$1,000 a year for nine of the University's twelve undergraduate schools. The School of Education was one of those exempted from the raise. "Due to the critical teacher shortage in America," said Dr. Harnwell, "we feel it is important to remove as many economic barriers as possible from the path of the would-be teacher or graduate teacher trainee. We hope these steps will encourage many more teacher candidates to let our School of Education help them."

FEDERAL AID TO COMBAT DELINQUENCY

A proposed bill to carry out the President's recommendations for Federal assistance to help combat juvenile delinquency was sent to Congress by the Department of Health, Education, and Welfare. The bill would authorize a five-year program of Federal grants to states for strengthening state and local programs to control juvenile delinquency. It also would authorize grants for demonstrations and studies and for training of personnel in this field. For the first year's operation in fiscal year 1958, the bill would authorize an appropriation of \$3 million. For each of the four succeeding fiscal years, it would authorize appropriations of up to \$9 million. Similar legislation was recommended by the President in 1955 and 1956.

For the grants to states, the proposed legislation would authorize an appropriation of \$2 million for the next fiscal year and up to \$5 million annually for the ensuing four years. Allotment of these grants would be made on the basis of the child population of the States, but no state would receive less than \$30,000. The Federal funds would be matched by state funds ranging from one third to two thirds of total state and Federal expenditures under the program, depending on the per capita income of the individual states.



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OUR CRITICS

For some reason, statistics never seem to satisfy the critic! He always tells you that figures are meaningless or that they really don't mean what they purport to mean. This always puzzles one! We answer the critic with figures and he wants them converted to something less tangible. If we answer qualitatively he often accuses us of generalizing and demands quantitative data. At any rate, let us look at state-wide enrollments in mathematics and science. Approximately 77,000, or more than half of all ninth-grade students (55.7 per cent) in California high schools are studying algebra. Forty-five per cent, or approximately 70,000 of the tenth-grade students, are taking plane geometry. Two thirds of the tenth-grade students, about 95,000, also study biology or life science. A quarter of the eleventh-grade students, about 30,000, are enrolled in chemistry. Nearly one sixth, or approximately 16,000 high school seniors, are studying physics. In terms of the native endowments of the total number of high-school students, those enrolled for mathematics and science are the most likely to succeed in such subjects.

The demand for scientists and engineers will increase. High-school administrators and teachers need to redouble their efforts through testing, counseling, and sound instruction to attract into these fields the largest possible number of promising students. And once the students are enrolled, we should make doubly sure that the instruction they receive is sound—that they are taught by teachers who know their subjects as well as knowing how to teach them. This may make it necessary for some of you to review your practice of selection and assignment with respect to holders of general secondary credentials. People who have only minors in mathematics or science are certainly not as well qualified to teach these subjects as are those with majors in them.

Our critics would have the public believe that we are confused as to our objectives. We use terms like "life adjustment," "social studies," and others which are completely misunderstood by many people, even by some of our patrons, yes—even by some of our colleagues. We talk about "exceptional" and "gifted" children without clearly identifying what we mean. We are accused of gearing our program to the average or below average child, causing more able children to be neglected.

One might even repeat a few of the statements that are being made regarding the steps Russia is taking to prepare engineers and scientists. In fact, these statements have merit in that they will spur us on to greater achievement. We won't, however, adopt any part of Russia's philosophy or employ any of her practices. We will continue in the future as we have in the past, to provide for our youth the education they need to develop as well-rounded human beings. *California Schools*, California State Department of Education, Sacramento, California.

A READING LABORATORY

Using an entirely new approach to the development of reading skills, students showed a 64% greater gain than a matched group using one-level materials. This new approach is incorporated in the *SRA Reading Laboratory* recently published by Science Research Associates, one of the nation's publishers of reading-improvement, educational testing, and guidance materials.

The *Reading Laboratory* is a multi-level reading program for use in upper elementary and junior and senior high schools. It enables every student in any class to start reading at his present level of achievement, and to progress in easy graded steps to higher levels as fast as his learning capacity allows.

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DEVEREUX SERVES

"Devereux Serves—Round the Clock—Through the Year." This is the title of a 32-page brochure recently published by The Devereux Foundation.

The Foundation's purpose is to provide professional men and women with a booklet that can be placed in the hands of troubled parents. In picture and copy it tells parents about the home-school units at Devereux—semi-autonomous units, with pupils grouped by age and educational need. It shows pictures of children living and learning in the Therapeutic Schools, Vocational Communities, and Remedial Camps. By presenting photographs of staff members and students of differing ages it attempts to assist the referral agency—the general practitioner, pediatrician, psychiatrist, consulting psychologist—who wishes to ease the transfer of the child from home to residential school. A copy of Devereux Serves will be sent on request.

Professional inquiries should be addressed to John M. Barclay, Director of Development, or Charles J. Fowler, Registrar, Devereux Schools, Devon, Pa. For western states, address Joseph F. Smith, Superintendent, or Keith A. Seaton, Registrar, Devereux Schools, Santa Barbara, Calif.



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Work with the *SRA Reading Laboratory* may be on a completely individual basis, or it may be on a systematic class basis. A complete *Teacher's Handbook*, with step-by-step instructions, is also provided. The *SRA Reading Laboratory* (Cost \$39.50; Student Record books—48c each) can be kept in continuous operation throughout a school day. Only one *Reading Laboratory* is needed per classroom. Further information and a brochure are available from the publisher, Science Research Associates, 57 W. Grand Avenue, Chicago, Illinois.

ENGINEERING SECRETARIAL TRAINING

A free pamphlet for engineers has been prepared by the Business Training College, Wood St. & Blvd. of the Allies, Pittsburgh 22, Pa. which details the *Engineering Secretarial Course* offered by the college. Inaugurated two years ago, the college will graduate its first class this June. The purpose of the training is to enable graduates to assist engineers who do not have time to concern themselves with details that could be handled by a secretary understanding the engineering language. The young man or woman who has desired an engineering career, but who has been unable to spend four or five years in college to secure it, can employ the course as an opportunity to become an associate or assistant as well as a secretary to an engineer.

Students complete a thorough secretarial course featuring all of the skills necessary to be a top-flight secretary. During this training, professional terminology is stressed in dictation and day-to-day study. In class, considerable time is spent in conducting experiments and undertaking research. Another feature of the training is the planned tours to industry and engineering facilities of various firms and organizations. Each student is required to research and write a thesis on some phase of engineering as a prerequisite for graduation.

SUMMER CONFERENCE ON SCHOOL LAW

The Fourth School Law Conference will be held at Duke University June 18-19, 1957. The program of this conference will be focused around the significant problem of "tort liability and the schools." In addition to the two general sessions, for which prominent speakers have been engaged, three panels on different aspects of liability will be conducted. The first will deal with "liability of the school district." The subject of the second panel will be "liability of school personnel." The last panel will be concerned with "protection against liability." Nationally recognized authorities will serve as consultants on these panels. For complete program announcement, write to E. C. Bolmeier, Chairman, School Law Conference, Duke University, Durham, North Carolina.

